



Q. 100, 1000 - 1000
1000 - 1000

②

SESSIONAL PAPERS.

VOLUME IV.—PART I.

FIRST SESSION OF THE SECOND PARLIAMENT

OF THE

PROVINCE OF ONTARIO.

Session 1871-72.



1091358

HUNTER, ROSE & CO.
PRINTERS' TORONTO.

LIST OF SESSIONAL PAPERS.

VOL. 4, SESSION 1871-72.

ARRANGED ALPHABETICALLY.

	No.		No.
Agriculture	5	Kingston and Pembroke Rail'y Co..	17
Agriculture	55	London, H. and B. Railway Co....	25
Asylums	4	Long Point Co.....	9
Births, Marriages and Deaths....	13	Long Point Co.....	31
Bonds and Securities of Office.....	11	Merrickville and W. Railway Co....	32
Bowmanville L. and B., Ry Co.....	34	Midland Railway Co	23
Canada Central Railway Co.....	18	Montreal and O. C. Railway Co....	19
Canada Central Railway Co.....	38	Municipal Loan Fund	8
Clergy Reserve Lands.....	52	Norfolk Railway Co.....	33
Clerks of the Peace	51	North Grey Railway Co..	16
Coroners	21	Ontario M. L. A. Co	48
Crown Lands	1	Ottawa, V. and M. Railway Co	27
Crown Lands	57	Port Whitby and P. P. Railway Co.	22
Crown Lands	6	Public Accounts.....	2
Education	3	Public Works	49
Education	53	Railway Aid	50
Education	15	Registrars	10
Elections... ..	39	Sault St. Marie R. and B. Co.....	26
Elections, Controverted.....	14	Simcoe, County of	58
Employees	45	Statutes of Ontario.....	43
Estimates.....	7	Superior Courts.....	12
Felonies, trial of.....	46	Timber.....	41
Free Grants	47	Toronto General Hospital.....	42
Germans	37	Toronto, G. and B. Railway Co	29
Gore District, M. F. I. Co	40	Toronto and Nipissing Railway Co.	35
Grand Junction Railway Co.	20	Toronto S. and M. Railway Co.....	24
Hamilton and L. E. Railway Co...	36	Toronto University.....	30
Immigration	56	Toronto University... ..	54
Justices of the Peace.....	44	Wellington, G. and B. Railway Co..	28

SESSIONAL PAPERS.

ARRANGED NUMERICALLY.

CONTENTS OF PART No. 1.

- No. 1..... Report of the Commissioner of Crown Lands, for the year 1870.
- No. 2..... Public Accounts of the Province of *Ontario*, for the year ending 31st December, 1870 ; Also,—Statements of Receipts and Expenditure on Account of the Province of *Ontario*, during the ten months ending 31st October, 1871 ; Also,—Public Accounts of the Province of *Ontario*, for the year ending 31st December, 1871. Also,—Statement of Expenditure on account of the Vote of Credit for 1872.
- No. 3..... Annual Report of the Normal, Model, Grammar and Common Schools of Ontario, for the year 1870, by the Chief Superintendent of Education.
- No. 4..... Annual Report of the Inspector of Asylums and Prisons, for the year 1871.
- No. 5..... Annual Report of the Commissioner of Agriculture and Public Works, on Agriculture and Arts for the year 1871.

CONTENTS OF PART No. 2.

- No. 6..... Statement of the amounts collected from the sales of Common School and Crown Lands from 1st July, 1867, to 30th June, 1870 ; an account of sales made between 13th June, 1853, and 7th March, 1861, and of the expenditure made on account thereof.
- No. 7 ... Estimates of certain sums required for the service of the Province for the year ending 31st December, 1872, accompanied by a Statement showing the amount required to complete the service of 1871 ; also Supplementary Estimates for 1872.
- No. 8 Return to an Address to His Excellency the Lieutenant-Governor, representing that, during a previous Session of this House, an Address was voted to His Excellency, praying for certain information touching the Municipal Loan Fund, including a statement of principal and the interest paid by each Municipality ; and further, representing that a Return was made to the said Address, which was incomplete, inasmuch as it did not contain any statement of the amount of interest paid by such Municipalities as have no sums to the credit of the sinking fund ; and praying that His Excellency will be pleased to cause to be laid before this House, with all convenient speed, a further statement in reply to the said Address.
- No. 9..... A Return from the *Long Point* Company, showing the names and places of residence, the number of shares, and the amount of such shares, held by each shareholder in said *Long Point* Company ; the names and residence of each person holding a license, or otherwise having a right to hunt, fish, or shoot upon the premises of the said Company ; the number of acres of land, marsh or water owned or claimed in *Long Point*, with the names of their directors and officers, with a copy of their license or licenses, from the Department of Marine and Fisheries of *Canada*, to take fish on Lake Erie or *Long Point* Bay or adjacent waters ; the quantity and value of the several kinds of fish, furs and game of all kinds taken by said Company, or their lessees, during the years 1869 and 1870. (*Not printed.*)

- No. 10 ... A Statement of the Returns forwarded to the office of the Provincial Secretary of all Fees and Emoluments received by the Registrars of *Ontario* for the year 1871, made in accordance with the provisions of Statutes of *Ontario*, 31 *Vic.*, cap. 20, sec. 74.
- No. 11 ... Detailed Statement of all Bonds and Securities recorded in the Provincial Registrar's Office since the last Return submitted to the Legislative Assembly upon the 4th of January, 1871; made in accordance with the provisions of Statute of *Ontario*, 32 *Vic.*, cap. 29.
- ✓ No. 12 ... Tariff of Fees made by the Judges of the Superior Courts of Common Law, Michaelmas Term, 1871. (*Not printed.*)
- No. 13 ... Registrar-General's Report, for 1871.
- No. 14 ... General Rules made in Hilary Term last by the Judges on the Rota for the trial of Election Petitions, by virtue of the 29th section of the Controverted Elections Act of 1871.
- ✓ No. 15 ... Return to an Address of the Legislative Assembly to his Excellency the Lieutenant-Governor, praying that His Excellency will cause to be laid before the House, copies of all regulations issued by the Council of Public Instruction respecting Public Schools, now in force, a list of the persons to whom the Council granted certificates; a statement of the results in detail of the late examinations for certificates of qualification of School Teachers; copies of the minutes of the Council of Public Instruction for the years 1867, 1868, 1869, 1870 and 1871; and copies of the programme of studies prescribed for Public Schools and High Schools. Also,—Supplementary Return. (*Not printed.*)
- No. 16 ... Papers in connection with the *North Grey* Railway Company's application for aid; also,—Supplementary Papers.
- No. 17 ... Papers in connection with the *Kingston* and *Pembroke* Railway Company's application for aid.
- No. 18 ... Papers in connection with the *Canada* Central Railway Company's application for aid.
- No. 19 ... Papers in connection with the *Montreal* and *Ottawa City* Railway Company's application for aid.
- No. 20 ... Papers in connection with the *Grand Junction* Railway Company's application for aid; also,—Supplementary Papers.
- No. 21 ... Return to an Address of the Legislative Assembly to His Excellency the Lieutenant-Governor, praying that he will cause to be laid before the House a Return giving a list of the names and residences of the Coroners of this Province.
- No. 22 ... Papers respecting the *Port Whitby* and *Port Perry* Railway Company's application for aid.
- No. 23 ... Papers respecting the *Midland* Railway Company's application for aid.
- No. 24 ... Papers respecting the *Toronto*, *Simcoe* and *Muskoka* Junction Railway Company's application for aid; also,—Supplementary Papers.

- | | |
|------------|---|
| No. 25 ... | Papers respecting the <i>London, Huron and Bruce</i> Railway Company's application for aid; also,—Supplementary Papers. |
| No. 26 ... | Papers respecting the <i>Sault Ste. Marie</i> Railway and Bridge Company's application for aid. |
| No. 27 ... | Papers respecting the <i>Ottawa, Vaudreuil and Montreal</i> Railway Company's application for aid; also,—Supplementary Papers. |
| No. 28 ... | Papers respecting the <i>Wellington, Grey and Bruce</i> Railway Company's application for aid; also,—Supplementary Papers. (<i>printed in part</i>) |
| No. 29 ... | Papers respecting the <i>Toronto, Grey and Bruce</i> Railway Company's application for aid; Also, —Supplementary Papers |
| No. 30... | Return to an Address of the Legislative Assembly to His Excellency the Lieutenant-Governor, praying that he will cause to be laid before the House, a Return of the names and residences of the members of the Senate of the University of <i>Toronto</i> during the years 1867, 1868, 1869, 1870, and 1871, respectively, of the number of the meetings of the said Senate called and actually held during the said years respectively, and of the number of the said meetings in each of the years aforementioned, at which each of the members of the said Senate respectively attended. (<i>Not printed.</i>) |
| No. 31 ... | Copies of all applications by the <i>Long Point</i> Company for a confirmatory Patent, or to purchase, lease or otherwise to acquire certain lands or marshes outside of <i>Long Point</i> , northerly of Blocks Nos. 15 and 16, on <i>Long Point</i> ; with copies of all letters and correspondence between the said Company and the Government relative thereto.—(<i>Not printed.</i>) |
| No. 32 ... | Papers respecting the <i>Merrickville and Westport</i> Railway Company's application for aid. |
| No. 33 ... | Papers respecting the <i>Norfolk</i> Railway Company's application for aid. |
| No. 34 ... | Papers respecting the <i>Bowmanville, Lindsay and Bobcaygeon</i> Railway Company's application for aid. |
| No. 35 ... | Papers respecting the <i>Toronto and Nipissing</i> Railway Company's application for aid. |
| No. 36 ... | Papers respecting the <i>Hamilton and Lake Erie</i> Railway Company's application for aid. |
| No. 37 ... | Return to an Address to His Excellency the Lieutenant-Governor, praying His Excellency to cause to be laid before the House, copies of all memorials or communications addressed to the Government, or any member thereof, or to the Department of Public Instruction, from the German population of the counties of <i>Bruce</i> and <i>Grey</i> relating to the School Law. —(<i>Not printed.</i>) |
| No. 38 ... | Return to an Address of the Legislative Assembly to His Excellency the Lieutenant-Governor, praying that His Excellency will cause to be laid before the House a copy of any Memorial or Petition, to His Excellency from the <i>Canada Central</i> Railway Company, in relation to any claim for land or other compensation for the construction of any portion of the |

said Railway, and of any correspondence between the Government and the said Company on the subject.—(*Printed for distribution to Members only.*)

- e
- No. 39 ... A statement from the Records of the Elections to this House, at the late general Election, and subsequent Elections, showing the total number of votes on the Voters' lists in each electoral division, the aggregate number of votes polled for each candidate in each electoral division in which there has been a contest, the total number of votes polled in each such division, and the population in each constituency, as shown by the late census.
- No. 40 ... Statement of the affairs of the *Gore* District Mutual Fire Insurance Company, for the year 1871.
- No. 41 ... Return to an Address to His Excellency the Lieutenant-Governor, praying His Excellency to cause to be laid before the House, a Return of the names of all parties or firms holding Timber Licenses in *Ontario*, on the first of January instant, setting forth the localities of the same, the area or number of square miles covered by each license, the date of each, and of any assignment of such license, the bonus paid for each; and also a statement of all sums in arrear and unpaid to the Crown by such license holders up to the said date, and the date when such arrears fell due, together with copies of any correspondence between the Crown Land Department and any license-holder in arrear, demanding payment of the same.
- No. 42 ... Return to an Address of the Legislative Assembly to His Excellency the Lieutenant-Governor, praying that His Excellency will cause to be laid before the House, copies of any Petitions from the Trustees of the *Toronto* General Hospital.—(*Printed for distribution to Members only.*)
- ✓ No. 43 ... Return to an Address of the Legislative Assembly to His Excellency the Lieutenant-Governor, praying that His Excellency will cause to be laid before the House a Return of the number of Statutes issued, the names of those to whom issued, a detailed account of the money received and money now due in connection with the sale of Statutes from January, 1868, to January, 1872.—(*Not printed.*)
- No. 44 ... Return to an Address of the Legislative Assembly to His Excellency the Lieutenant-Governor, praying that His Excellency will cause to be laid before the House, a list of all Justices of the Peace duly qualified and acting, or entitled to act as such within the Province of *Ontario*.—(*Not printed.*)
- No. 45 ... Return to an Address of the Legislative Assembly to His Excellency the Lieutenant-Governor, praying that His Excellency will cause to be laid before the House, a Return showing the names of all the Employees of the several Government Offices, also of this House, the date of their employment, whether permanent or temporary, also the salary or fees paid each of such Employees.
- No. 46 ... Return to an Address of the Legislative Assembly to His Excellency the Lieutenant-Governor, praying that His Excellency will cause to be laid before the House, a Return in respect to cases under the Act 32 and 33 *Vic.*, chap. 35, for the more speedy trial of Felonies and Misdemeanours, from the several Counties in *Ontario* for the year 1871.

-
- | | |
|------------|--|
| No. 47 ... | Return to an Address of the Legislative Assembly to His Excellency the Lieutenant-Governor, praying His Excellency to cause to be laid before the House, a copy of the Order in Council of the fourth of October last, under which certain Timber Berths in the Free Grant District were sold or offered for sale, together with a Return giving the names of the purchasers ; the amount paid by way of bonus on each berth or limit respectively ; the dues reserved to be paid on said Timber under the license granted or to be granted ; the term for which said license is to remain in force, and the conditions therein (if any) respecting the settlement under the Free Grant Act of the land embraced in said Timber Berths ; also, copy of any report, statement or information in the possession of the Crown Lands Department, showing the quality, and probable quantity of pine timber and average per centage of land fit for settlement in each berth. |
| No. 48 ... | Statement of the affairs of the <i>Ontario</i> Mutual Life Assurance Company for the nine months ending 1st December, 1870, and for the year ending 1st December, 1871. |
| No. 49 ... | Annual Report of the Commissioner of Agriculture and Public Works for the Province of <i>Ontario</i> , on Public Works, for the year 1871. |
| No. 50 ... | Orders in Council relative to the Railway Aid Fund. |
| No. 51 ... | Return to an Address of the Legislative Assembly to His Excellency the Lieutenant-Governor, praying that he will cause to be laid before the House, a Return showing the amount of emoluments of office received, during the year 1871, by the several Clerks of the Peace and County Crown Attorneys of this Province, and showing in tabular form the nature of the services for which such emoluments were so received and the gross amounts received for each particular kind of service. |
| No. 52 ... | Return to an Address to His Excellency the Lieutenant-Governor, praying that His Excellency will cause to be laid before the House, a statement shewing the Revenue derived from the sale of Timber on lands set apart as Clergy Reserve Lands, from the year 1854 to the year 1868 inclusive ; also, how the same has been appropriated. |
| No. 53 ... | Return to an Address to His Excellency the Lieutenant-Governor, praying His Excellency to cause to be laid before the House, a Return of all correspondence which has passed between any member of the present Government and the Chief Superintendent of Education during the present Session, in so far as such correspondence relates to any proposed changes, in the School Law and in the management of the Education Office, also,—Supplementary Return. |
| No. 54 ... | Annual Report of the Senate of the University of <i>Toronto</i> , for the Academic year 1870-1871. |
| No. 55 ... | Return to an Address to His Excellency the Lieutenant-Governor, praying His Excellency to cause to be laid before the House, a Return of all correspondence in reference to the purchase of the Agricultural Farm, copies of all reports as to the nature and character of the soil, the location of streams, springs, and an estimate of the amount expended by the contractors towards the erection of an Agricultural College ; also, copies of all reports respecting the working of Agricultural Colleges in other countries. |

-
- | | |
|------------|--|
| No. 56 .. | Annual Report of the Commissioner of Agriculture and Public Works for the Province of <i>Ontario</i> , on Immigration, for the year 1871. |
| No. 57 ... | Report of the Commissioner of Crown Lands of the Province of <i>Ontario</i> , for the year 1871. |
| No. 58 ... | Return to an Address to His Excellency the Lieutenant-Governor, praying His Excellency to cause to be laid before the House a Return shewing the surveyed lands in the County of <i>Simcoe</i> , belonging to this Province, the fee of which is still in the Crown, showing the Township, Town, or Village, number and concession of each lot or part of lot. Also, of any timber license granted for any lot, and if so, the date and terms of such license.—(<i>Not printed.</i>) |
-

REPORT

OF THE

Commissioner of Crown Lands

OF THE

PROVINCE OF ONTARIO,

FOR THE YEAR 1870.

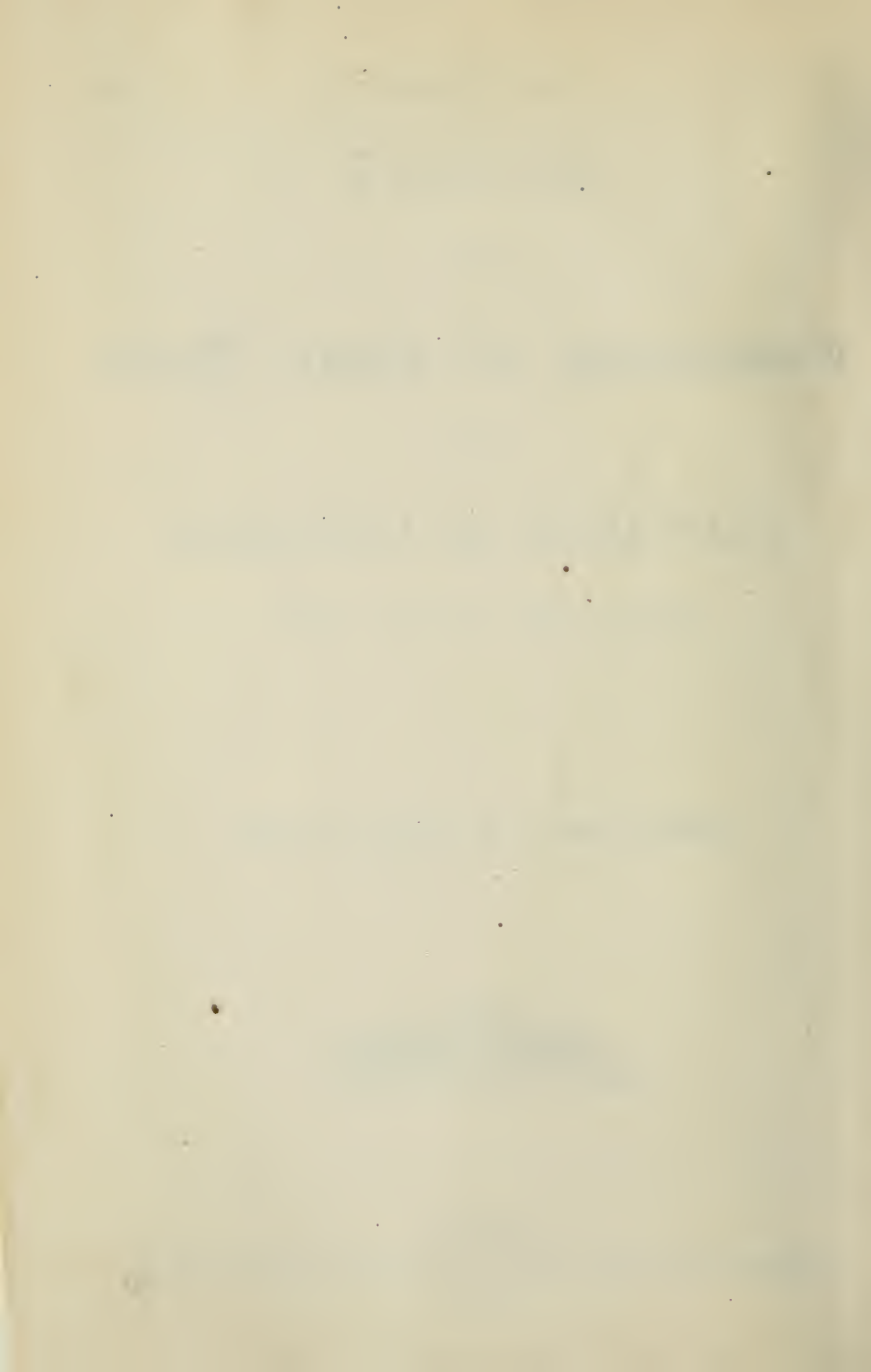
~~~~~  
Printed by Order of the Legislative Assembly.  
~~~~~



Toronto :

PRINTED BY HUNTER, ROSE & CO., 86 AND 88 KING ST. WEST.

1871.



CONTENTS.

	PAGE
Crown Lands.....	v
Clergy Lands.....	v
Common School Lands.....	v
Grammar School Lands.....	v
Woods and Forests.....	vi
Collections and Revenue.....	vi
Mining Lands.....	vi
Surveys.....	vii
Free Grants.....	vii
Colonization Roads.....	vii



REPORT
OF THE
COMMISSIONER OF CROWN LANDS

OF THE
PROVINCE OF ONTARIO,
FOR THE YEAR ENDING 31st DECEMBER, 1870.

To His Excellency the Honorable WILLIAM PEARCE HOWLAND, Companion of the Most Honorable Order of the Bath, Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR EXCELLENCY, —

I have the honor to submit to Your Excellency the following Report of the proceedings, transactions and affairs of the Department of Crown Lands for the year ending the 31st December, 1870 :—

CROWN LANDS.

There were sold during the year, 37,538 acres of Crown Lands. The sales amount to \$39,876, and the collections to \$113,491.

CLERGY LANDS.

Of the Clergy Lands, 10,162 acres were sold during the year. The sales amount to \$17,031, and the collections to \$88,634.

COMMON SCHOOL LANDS.

There were sold of the Common School Lands during the year, 3,256 acres. The sales amount to \$10,538, and the collections to \$94,903.

GRAMMAR SCHOOL LANDS.

There were sold of Grammar School Lands during the year, 1,263 acres. The sales amount to \$2,344, and the collections to \$5 950.

WOODS AND FORESTS.

The revenue derived from the Lower Ottawa Agency having been found insufficient to warrant its continuance, the Agency was abolished at the commencement of the year, and its duties transferred to the Agency at Ottawa. No new timber limits have been licensed during the year. The north-west quarter of the Township of Anson, containing an area of about twelve square miles, which had been formerly under license, and extensively worked, was sold as a timber limit in February last, at public auction, at a bonus equal to \$640 per square mile, subject to the ordinary timber dues and ground rent, being the largest bonus ever realized at a Government sale of timber limits in Western Canada.

The total accruals for timber dues, ground rents, and bonuses, during the year, amount to \$379,965 (see Appendix No. 10), and are less than the accruals for 1869. The difference arises from the production of timber being greater in 1869 than during the present year, and the bonuses being less than in 1869, in consequence of no new limits being disposed of. The timber revenue during the year amounts to \$425,901. (See Appendix No. 5.)

The Appendix No. 11 contains a statement of the revenue for each of the ten years preceding 1867, and for each of the four succeeding years, and the following figures, extracted from that Appendix, exhibit a comparison of the timber revenue for the last three years, with the revenue for the years 1863, 1865, and 1866, being the three years which show the largest revenue previous to 1867.

I.—LARGEST REVENUE FOR ANY THREE YEARS PREVIOUS TO 1867.

In 1863 the timber revenue was	\$197,093
In 1865 do	183,380
In 1866 do	197,965

II.—THE REVENUE FOR THE LAST THREE YEARS.

In 1868 the revenue was	\$234,209
In 1869 do	435,397
In 1870 do	425,901

The timber dues were increased 50 per cent. in April, 1869, but the average annual increase of timber revenue during the years 1869 and 1870 has been fully 120 per cent., or say \$232,000 in each year in excess of the largest revenue received from the Upper Canada woods and forests during any one of the ten years previous to 1867.

COLLECTIONS AND REVENUE.

The total collections in the Department during the year amount to \$731,772, of which \$542,284 may be considered as revenue. See Appendices Nos. 6 and 7.)

MINING LANDS.

There were issued during the year 16 Patents for mining lands on the north shore of Lake Superior, covering an area of 4,306 acres of land. (See Appendix No. 13.) Nine mining licenses were also issued. (See Appendix No. 18.)

The reports of A. A. Campbell, Esq., Inspector of the Madoc Mining Division, and of E. B. Barron, Esq., Inspector of the Lake Superior Division, will be found in Appendices Nos. 21 and 22.

SURVEYS.

The surveys of the Townships of Mayo, Hagerman, McIntyre and McTavish, and the Town plot of Port Carling were completed, and the surveys of the Townships of Chapman, Croft, Spence, Ryerson, McClure, Faraday, Monteith, McMurrich, and parts of Wood and Muskoka were proceeded with during the year. (See Appendices Nos. 14 and 15.)

With the view of ascertaining the character of the country lying to the north of Lake Superior, two exploratory surveys were made of that territory during the year—one under P.L.S. J. A. Fleming, and the other under P.L.S. Walter Beatty, and their respective reports will be found in Appendices Nos. 23 and 24.

Instructions for 15 municipal surveys were issued, and 10 municipal surveys were confirmed, during the year. (See Appendices Nos. 16 and 17.)

FREE GRANTS.

There were 511 locations made under the Free Grants and Homestead Act in 1868, and 566 in 1869. It will be observed, on reference to Appendix No. 12, that there has been a large increase in the number of the locations during the present year.

There were open for location at the commencement of the year, 39 Townships, to which were added during the year the Townships of Medora, Monek, Christie, Fergusson, McKellar Glamorgan, Snowden, Chaffey, Stisted, Abinger, Denbigh, Clarendon, Miller and Palmerston—making in all 53 Townships now open for location under the said Act, in which 1,200 locations were made during the present year on 155,427 acres of land, and 4,586 acres of land were sold to Free Grant Locatees during the same period.

COLONIZATION ROADS.

The total Expenditure on account of Colonization Roads during the year is \$50,000, the particulars of which are mentioned in Appendix No. 20.

Respectfully submitted,

S. RICHARDS,

Commissioner of Crown Lands.

DEPARTMENT OF CROWN LANDS,

Toronto, 31st December, 1870.

CONTENTS OF APPENDICES.

APPENDIX.	PAGE
1.—Return of Officers and Clerks in the Department.	1
2.—List of Crown Land Agents.....	3
3.—List of Crown Timber Agents.....	4
4.—Statement of number of Acres sold.	5
5.—Statement of Revenue Collected during the year.....	5
6.—Statement of the Gross Collections of the Department.....	6
7.—Statement of the Receipts of the Department.....	6
8.—Statement of Receipts of the Department.....	7
9.—Statement of Gross Disbursements.....	7
10.—General Statement of Timber, &c.....	8-9
11.—Statement showing amounts accrued.....	10
12.—Return of the number of persons located for Free Grants.....	11
13.—Statement of Mineral Lands.	14
14.—Statement of Crown Land Surveys completed.....	15
15.—Statement of Crown Land Surveys in progress.	16
16.—Statement of Municipal Surveys.....	17
17.—Statement of Municipal Surveys confirmed.....	18
18.—Mining Licenses which have issued in Lake Superior Mining Division.....	19
19.—Statement of Letters Registered in the Department.....	20
20.—Report upon Colonization Roads.....	21
21.—Report of the Inspector, Madoc Mining Division.....	28
22.—Report of the Mining Inspector, North Shore of Lake Superior.....	30
23.—Exploratory Survey.....	32
24.—Exploratory Survey.....	35

APPENDIX No. 1.

RETURN OF OFFICERS AND CLERKS in the Department of Crown Lands, for the year ending 31st December, 1870.

Branch.	Name.	Designation.	When appointed.	Salary per annum.	Remarks.
Land Sales and Free Grants	Hon. S. Richards.....	Commissioner	1867, July 1	\$ cts. 3,200 00	
	Thos. H. Johnson	Assistant Commissioner	1869, August 21	2,600 00	
	John M. Currie	Clerk	1869, March 30	1,400 00	
	John C. Tarbutt.....	Chief Clerk	1841, June 1	1,800 00	
	A. Kirkwood	Clerk	1854, March 21	1,500 00	
	A. J. Taylor	do	1854, October 29	1,200 00	
	J. M. Grant	do	1860, May 12	1,100 00	
	H. G. Langlois	do	1868, August 1	500 00	Transferred to Woods and Forests Branch, 1st June, 1870.
	Thomas Devine	Head of Surveys	1846, July 11	1,800 00	
	E. Fox	Surveyor and Draughtsman	1857, September 28	1,280 00	
Surveys, Patents and Roads	G. B. Kirkpatrick	do	1866, January 30	800 00	
	H. J. Jones	Clerk	1840, November 9	1,400 00	
	J. Innes	do	1848, November 1	900 00	
	R. H. Temple	do	1863, September 4	730 00	Resigned 15th December, 1870.
	J. W. Bridgland	Clerk and Superintendent of Colonization Roads	1856, January 22 .....	.....	Salary \$1,000, paid out of Colonization Roads appropriation.
	J. C. Miller	Chief Clerk	1868, March 10	1,600 00	
	G. B. Cowler	Clerk	1857, October 17	1,400 00	
Woods and Forests	W. H. Cowler	do	1868, August 1	500 00	
	E. G. Kirby	do	1869, August 6	365 00	Resigned 30th May, 1870.
	William Ford	Accountant	1852, April 10	1,800 00	
Accounts	D. G. B. Ross	Book-keeper	1861, April 15	900 00	
	R. H. Browne	Clerk	1862, May 14	800 00	
	James Scott	do	1869, September	800 00	

APPENDIX No. 1—*Continued.*

RETURN OF OFFICERS AND CLERKS in the Department of Crown Lands, for the year ending 31st December, 1870.

Branch.	Name.	Designation.	When appointed.	Salary per annum.	Remarks.
Registry	John Morphy	Registrar	1851, June 8	\$ cts. 1,400 00	
	John Bradshaw	Office Keeper	1852, March 27	500 00	
	A. McDonald	Messenger	1864, November 3	450 00	

12

WILLIAM FORD,
Accountant.

THOS. H. JOHNSON,
Assistant Commissioner.

DEPARTMENT OF CROWN LANDS,
Toronto, 31st December 1870.

APPENDIX No. 2.
LIST OF CROWN LAND AGENTS, 1870.
AGENTS FOR SALE OF LANDS.

NAME.		DISTRICT OR COUNTY.	Date of Appointment	Commission.	REMARKS.
A. S. Cadenhead.....	Wellington	6th August, 1870.....	\$ cts.		
Wm. Halpenny	Part of Renfrew	8th Nov., 1869.....	185 23		
C. F. Holtermar.....	Part of Renfrew, &c.....	22nd June, 1865	230 59		
H. S. Huber	Waterloo	November, 1863	77 13		
Wm. Jackson	Grey	November, 1863	464 86		
J. Macpherson	Part of Frontenac, &c.....	3rd November, 1854.....	1,637 03		
A. McXabb	Bruce	21st February, 1860.....	168 84		Died 12th April, 1870.
E. Perry	Parts Frontenac and Addington	29th April, 1851	1,914 26		
J. McKibbin	Parts Frontenac and Addington	27th March, 1856	191 09		
G. M. Roche	Part of Victoria	24th November, 1870	238 50		
A. Russell	Part of Victoria	22nd October, 1858.....	931 57		Died 30th August, 1870.
J. Sharman	Wellington	21st August, 1869.....	636 53		Resigned 23rd May, 1870.
C. Widder	Perth	27th April, 1853	800 42		
J. Wilson	Huron	15th January, 1857.....	15 68		
	Part of Algoma District	25th July, 1845			
FREE GRANT AGENTS.					
W. C. Armstrong	Part of Peterboro'	13th June, 1868	Salary.		
D. Anderson	Do	21st November, 1870.....	500 00		Died 20th August, 1870.
J. D. Beatty	Part of Muskoka District	21st June, 1869	500 00		
J. Graham	Parts of Victoria and Peterboro'	28th May, 1869	500 00		
C. W. Lount	Part of Muskoka District	23rd May, 1868	1,000 00		
S. G. Lynn	Part of District of Nipissing	28th August, 1869.....	500 00		
J. P. Moffat	Part of Renfrew	28th August, 1869.....	500 00		
E. Playfair	Parts of Frontenac and Addington	5th March, 1870.....	500 00		
J. R. Tait	Part of Hastings	28th May, 1869.....	500 00		
MINING INSPECTORS.					
A. A. Campbell	Madoc	25th September, 1869.....	1,000 00		
E. B. Borron	Lake Superior	12th May, 1869.....	1,000 00		Mr. Campbell also acts as agent for sale of lands for part of County of Hastings.

THOS. H. JOHNSON,
Assistant Commissioner.

WILLIAM FORD,
Accountant.
DEPARTMENT OF CROWN LANDS,
TORONTO, 31st December, 1870.

APPENDIX No. 3.

LIST OF CROWN TIMBER AGENTS in the Province of Ontario, their Assistants, names of Territories, Residences, dates of Appointments, and Salary allowed to each for his services, during the year ending 31st December, 1870.

Names of Territories.	Names of Agents and Assistants.	Residences.	Date of Appointment.	Salary per Annum.	Remarks.
Upper Ottawa	A. J. Russell, Agent..... C. S. McNutt, Assistant..... J. Ritchie, Clerk..... L. A. Russell, Draughtsman..... E. T. Smith, Clerk.....	Ottawa City..... Do..... Do..... Do..... Do.....	June, 1846..... 13th April, 1858..... 23rd June, 1864..... 15th November, 1865..... 23rd June, 1864.....	\$1,840..... 1,200..... 700..... 600..... 550.....	{The Crown Timber Office, Ottawa, acts for the Provinces of Ontario and Quebec, and also for the Dominion of Canada in the Collection of Slide Dues; the proportion of Salaries chargeable to each Province, and the Dominion not yet determined.
Ontario	Jos. F. Way, Agent..... J. A. MacInnes, Clerk..... J. A. G. Crozier, do.....	Belleville..... Do..... Do.....	6th May, 1854..... 26th February, 1859..... 1st December, 1867.....	1,440..... 800..... 500.....	
Collector at Quebec	McLean Stewart, Collector..... Wm. O'Kane, Assistant..... John McKay, Clerk.....	Quebec..... Do..... Do.....	27th September, 1845..... 1st June, 1861..... 27th May, 1864.....	1,800..... 1,200..... 800.....	

WILLIAM FORD,
Accountant.

THOS. H. JOHNSON,
Assistant Commissioner.

DEPARTMENT OF CROWN LANDS,
Toronto, 31st December, 1870.

APPENDIX No. 4.

STATEMENT of Number of Acres sold, amount of Sales and amount of Collections for the year 1870.

SERVICE.	Acres Sold.	Amount of Sales.	Amount of Collections.
		\$ cts.	\$ cts.
Crown Lands	37,538	39,876 12	113,491 04
Clergy Lands	10,162 $\frac{1}{2}$	17,031 95	88,634 25
Common School Lands.....	3,256 $\frac{1}{2}$	10,538 46	94,903 82
Grammar School Lands	1,263	2,344 20	5,950 47
	52,219 $\frac{3}{4}$	69,790 73	302,979 58

WILLIAM FORD,
Accountant.

THOS. H. JOHNSON,
Assistant Commissioner.

DEPARTMENT OF CROWN LANDS,
Toronto, December 31st, 1870.

APPENDIX No. 5.

WOODS AND FORESTS.

STATEMENT of Revenue collected during the year ending 31st December, 1870

	\$ cts.	\$ cts.
Amount of Ottawa Territory collections by A. J. Russell.....	171,736 26	
Do do do do per McL. Stewart.....	93,106 54	264,842 80
Amount of Ontario Territory collections by Jos. F. Way.....	82,896 30	
Do do do do per McL. Stewart.....	4,888 14	44
Amount of Western Timber District collections.....	63,947 67	
Do do do do per McL. Stewart.....	9,326 16	73,273 83
Total Timber Dues, Ground Rent and Bonuses.....		425,901 07

J. C. MILLER,
Chief Clerk.

THOS. H. JOHNSON,
Assistant Commissioner.

DEPARTMENT OF CROWN LANDS,
WOODS AND FORESTS BRANCH,
Toronto, Dec. 31st, 1870.

APPENDIX No. 6.

STATEMENT OF THE GROSS COLLECTIONS of the Department of Crown Lands, for
the year 1870.

	\$ cts.
Crown Lands.....	113,491 04
Clergy Lands.....	88,634 25
Common School Lands	94,903 82
Grammar School Lands.....	5,950 47
Woods and Forests	425,901 07
Surveyors Fee Fund	220 00
Casual Fees	346 42
Mines	2,325 49
	731,772 56

THOS. H. JOHNSON,
Assistant Commissioner.

WILLIAM FORD,
Accountant.

DEPARTMENT OF CROWN LANDS,
Toronto, 31st December, 1870.

APPENDIX No. 7.

STATEMENT OF THE RECEIPTS of the Department of Crown Lands, for the year
1870, which are considered as REVENUE.

	\$ cts.
Crown Lands.....	113,491 04
Woods and Forests	425,901 07
Surveyors' Fee Fund	220 00
Casual Fees	346 42
Mines	2,325 49
	542,284 02

THOS H. JOHNSON,
Assistant Commissioner.

WILLIAM FORD,
Accountant.

DEPARTMENT OF CROWN LANDS,
Toronto, 31st December, 1870.

APPENDIX No. 8.

STATEMENT of Receipts of the Department of Crown Lands which are considered as special Funds.

CLERGY LANDS.	\$ cts.	\$ cts.
Principal	54,137 81	
Interest	34,029 64	
Rent	450 80	
Inspection	16 00	
COMMON SCHOOL LANDS.		88,634 25
Principal	54,589 82	
Interest	40,314 00	
GRAMMAR SCHOOL LANDS.		94,903 82
Principal	3,822 77	
Interest	2,077 95	
Rent	36 75	
Inspection	13 00	
Refunds on above Services.		5,950 47
Clergy Lands	389 58	\$189,488 54
Common School Lands	563 52	
Grammar do	157 85	
		\$1,110 95

THOS. H. JOHNSON,
Assistant Commissioner.

WILLIAM FORD,
Accountant.

DEPARTMENT OF CROWN LANDS,
Toronto, 31st December, 1870.

APPENDIX No. 9.

STATEMENT of Gross Disbursements of the Department of Crown Lands for the year 1870, exclusive of petty contingencies.

	\$ cts.
Colonization Roads	50,000 00
Surveys	40,000 00
Board of Examiners of Provincial Land Surveyors	170 00
Old Ledger Accounts	780 05
Province of Canada	5,450 06
Compensation Claims	2,060 00
Refunds of amounts received subsequently to 1st July, 1867	11,524 60
Commission of Agents	7,551 73
Salaries of Agents	8,943 53
Agents Disbursements	1,101 04
Wood Ranging, Inspection, &c.	8,033 87
Special Services	669 81
R. H. Temple, Gratuity per O. C., 15th December, 1870	365 00
Contingencies	550 46
Advertising	592 56
	\$137,792 71

WILLIAM FORD,
Accountant.

THOS. H. JOHNSON,
Assistant Commissioner.

DEPARTMENT OF CROWN LANDS,
Toronto, 31st December, 1870.

APPENDIX

WOODS AND

GENERAL STATEMENT of Timber, &c., and amounts accrued from Timber

QUANTITIES AND DESCRIP

TERRITORIES AND NAMES OF AGENTS.	Area under License.	Saw Logs.		White Pine.		Red Pine.		Oak.	
	Square miles	White Pine.	Other.	Pieces.	Feet.	Pieces.	Feet.	Pieces.	Feet.
Ottawa Territory, A. J. Russell, Agent.....	7633	762940	.....	114804	6159624	40154	1448103	76	2189
Ontario Territory, Jos. F. Way, Agent.....	1849	442833	3520	6685	354430	162	7252	83	2954
Western Timber District	2523	224893	1079	3278	203947	88	5193	424	21423
Total	12005	1430666	4599	124767	6715001	40404	1460548	583	26566

GENERAL STATEMENT OF

QUANTITIES AND DESCRIP

TERRITORIES AND NAMES OF AGENTS.	Boom Tim- ber, Binders and Floats.	Railway Ties.	Cedar Rails.	Shingle and Stave	Cordwood.		Staves.	
				Bolts.	Hard.	Soft.	West India.	Stan- dard.
Ottawa Territory, A. J. Russell, Agent.....	BT 8288	4467	.....	Cords. 1	Cords.	Cords. 932	.....	.....
Ontario Territory, Jos. F. Way, Agent.....	BT 2409 B 2807 F 1394	28964	300	834½	.....	.....	.....	.....
Western Timber District	BT 166	1415	.....	.....	62	.....	56536	14592
Total	15064	34846	300	835½	62	932	56536	14592

J. C. MILLER,
Chief Clerk.

DEPARTMENT OF CROWN LANDS,
WOODS AND FORESTS BRANCH,
December 31st, 1870

No. 10.

FORESTS.

Dues, Ground Rent, and Bonuses, during the year ending 31st December, 1870.

TION OF TIMBER.

Elm.		Ash.		Tamarac.		Birch, Cedar, Hemlock and Spruce.		Basswood.		Cherry, Beech, and White Wood.		Butternut and Maple.	
Pieces.	Feet.	Pieces.	Feet.	Pieces.	Feet.	Pieces.	Feet.	Pieces.	Feet.	Pieces.	Feet.	Pieces.	Feet.
539	15882	639	26739	530	16811	B 48 S 7 H 142 C 32	1663 435 5790 547	111	4859	B 7 W 1	202 29	M 45 B 2	1368 77
593	15792	201	8836	152	3344	B 3	140	20	797	.....	.....	M 6	240
2125	103032	26	1312	34	1374	.....	.....	6	377	c 8	291	.....	.....
3257	34706	866	36887	716	21529	232	8575	137	6033	16	522	5	1685

TIMBER, &c.—Continued.

TION OF TIMBER.

Miscellaneous	AMOUNTS ACCRUED.					
	Trespass, &c.	Fractions.	Timber Dues.	Ground Rent.	Bonus.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Traverses .....1000	3071 58	0 23	215424 86	15753 00	87 00	234336 67
Cedar, round .....2800	} 3015 60	0 06	73366 07	3905 25	794 50	81081 48
Telegraph Poles .....2520						
Ship Knees 21	10933 73	0 36	39467 56	5224 83	8920 50	64546 98
.....	17020 91	0 65	328258 49	24883 08	9802 00	379965 13

THOS. H. JOHNSON,
Assistant Commissioner.

APPENDIX No. 11.

STATEMENT showing amounts accrued, and amounts collected, for Timber Dues, Ground Rents, and Bounties, in Upper and Lower Canada respectively, during the ten years from 1857 to 1866 inclusive; and from Upper Canada, or Ontario, during the years 1867, 1868, 1869, and 1870.

YEARS.	ACCRUALS.			COLLECTIONS.		
	Upper Canada.	Lower Canada.	Total.	Upper Canada.	Lower Canada.	Total.
1857.....	\$ cts. 135,310 64	\$ cts. 120,797 96	\$ cts. 256,108 60	\$ cts. 94,921 15	\$ cts. 114,023 53	\$ cts. 208,944 68
1858.....	111,739 62	111,081 53	222,821 15	141,185 90	134,476 00	275,661 90
1859.....	140,409 96	142,071 97	282,481 93	136,189 33	145,745 59	281,934 92
1860.....	176,460 39	168,973 36	345,433 75	149,921 22	168,330 38	318,251 60
1861.....	156,253 57	154,101 38	310,354 95	127,995 88	127,819 10	255,814 98
1862.....	143,357 59	136,830 79	280,188 38	144,321 31	144,321 31	303,632 17
1863.....	170,160 12	157,484 72	327,644 84	189,562 80	189,562 80	386,656 53
1864.....	188,171 74	155,793 97	343,965 71	121,367 79	121,718 52	243,086 71
1865.....	146,079 67	151,034 24	297,113 91	183,380 75	160,035 23	343,415 98
1866.....	203,040 46	166,036 54	369,077 00	197,965 85	138,678 04	336,643 89
	1,570,983 76	1,464,206 46	3,035,190 22	1,509,352 46	1,444,740 50	2,954,092 96
1867.....	198,118 82					
1868.....	190,237 66					
1869.....	508,561 85			152,266 60		
1870.....	379,965 13			234,209 85		
				435,397 81		
				425,901 07		

J. C. MILLER,

Chief Clerk.

DEPARTMENT OF CROWN LANDS,

Toronto, 31st December, 1870.

THOS. H. JOHNSON,

Assistant Commissioner.

APPENDIX No. 12.

RETURN of the number of persons located for Free Grants and number of acres located, the number of purchasers and number of acres sold to Locatees under the Free Grants and Homestead Act of 1868, during the year 1870.

TOWNSHIP.	DISTRICT OR COUNTY.	Number of persons located.	Number of acres located.	Number of purchasers.	Number of acres sold.
Brunel.....	District of Muskoka	54	6868	3	8
Draper.....		74	8572½	14	195
Macaulay		100	12540	11	1065½
McLean		52	7239	7	52
Medora		127	13574	10	288
Monck.....		32	4249	7	209
Muskoka.....		30	3987	3	318
Stephenson.....		87	10626	Nil.	Nil.
Watt		49	5587	1	189
Cardwell.....		15	1785	2	90
Humphrey		32	4862	3	55
Christie	District of Parry Sound	15	2526	2	17
Ferguson ..		22	3067	2	61
Foley		40	7004	4	32
McDougall		28	4279	3	3
McKellar		71	10573	9	222

APPENDIX No. 12.—Continued.

RETURN of the number of persons located for Free Grants and number of acres located, the number of purchasers and number of acres sold to Locatees under the Free Grants and Homestead Act of 1868, during the year 1870.

TOWNSHIP.	DISTRICT OR COUNTY.	Number of persons located.	Number of acres located.	Number of purchasers.	Number of acres sold.
Anstruther.....	County of Peterboro'	Nil.	Nil.	Nil.	Nil.
Cardiff.....		4	577	"	"
Chandos.....		3	277	"	"
Glamorgan.....		3	356	"	"
Monmouth.....		2	232	"	"
Minden.....		4	370	"	"
Snowdon.....		10	1037	"	"
Stanhope.....		8	744	1	97
Anson.....		3	236	2	200
Hindon.....		Nil.	Nil.	Nil.	Nil.
Carlow.....	County of Hastings	11	1798	2	2
Dunganon.....		18	2540	6	11
Herschel.....		4	594	2	13
Monteagle.....		18	1869	15	223
Mayo.....	County of Hastings	5	668	2	67
Wicklow.....		10	1341	5	28

Alice.....	22	2200	3	206
Algona, S	Nil.	Nil.	Nil.	Nil.
Buchanan	19	2376	3	183
Fraser	2	200	Nil.	Nil.
Grattan	2	198	3	77
Head	2	200	1	31
McKay	Nil.	Nil.	Nil.	Nil.
Petewawa	15	1576	2	4
Rolph	15	1534	6	224
Wilberforce ..	9	1045	2	150
Wylie	5	675	Nil.	Nil.
Chaffey	105	14503	10	112
Hagarty	4	439	Nil.	Nil.
Richards	Nil.	Nil.	"	"
Sherwood	1	200	"	"
Stisted	36	4907	1	29
Abinger	2	247	Nil.	Nil.
Denbigh	11	1172	"	"
Clarendon	16	1694	1	104
Miller	1	86	Nil.	Nil.
Palmerston	2	198	"	"
1200		155427½	148	4585½

THOS. H. JOHNSON,
Assistant Commissioner.

APPENDIX No. 13.

STATEMENT of Mineral Lands on the North Shore of Lake Superior, which have been Patented during the year ending the 31st December, 1870.

No.	No. of Description.	Patentee.	DESCRIPTION OF MINING TRACT.	Acres.	Date of Patent.
1	24	W. S. McFarlane	Location 22 A, Thunder Bay	240	1870.
2	25	Chas. W. Wilson	Do 23 A do	240	18th February.
3	26	J. B. Oliver	Do 24 A do	240	18th February.
4	27	J. D. Ferrier	Do S. McIntyre	267 1/2	10th March.
5	28	Wm. McD. Dawson	Do T do	262 1/2	10th March.
6	29	J. K. Boswell	Do U do	262 1/2	10th March.
7	30	Geo. Patterson	Do V do	262 1/2	10th March.
8	31	John Kerr	Do W do	240	10th March.
9	32	Wm. Lockwood	Do P do	400	10th March.
10	33	W. Watkin	Do A 1 do	60	11th May.
11	34	J. C. Rowley	Do Q do	200	11th May.
12	35	W. Watkin	Do A 2 do	145	11th May.
13	36	J. C. Rowley	Do R 1 do	235	11th May.
14	37	J. Clark	Do 12 Z and 12 Z, Thunder Bay	333 1/2	8th October.
15	38	R. Barber	Do 13 Z do	118 1/2	29th November.
16	39	S. J. Dawson and J. Kerr	Do 10 and 12 do	800	5th December.

THOS. H. JOHNSON,
Assistant Commissioner.

SURVEYS BRANCH.
THOS. DEVINE,
Surveyor-in-Chief.

DEPARTMENT OF CROWN LANDS,
Toronto, 31st December, 1870

APPENDIX No. 14.

STATEMENT OF CROWN LAND SURVEYS completed and closed during the year ending 31st December, 1870.

No.	Date of Instruction.	Surveyor.	Description of Survey.	Balance Paid.	No. of acres surveyed.
				\$ cts.	Acres.
1...	26th November, 1868.....	H. O. Wood.....	Township of Mayo.....	108 89	33,023
2...	18th October, 1869.....	Thomas Byrne.....	do Hagerman.....	2,228 20	49,831
3...	8th May, 1869.....	A. B. Scott.....	do McIntyre.....	191 88	53,253
4...	29th June, 1869.....	Hugh Wilson.....	do McTavish.....	2,700 23	72,869
5...	8th September, 1870.....	A. B. Scott.....	Port Carling, Township Plot.....	422 90	245
6...	20th May & 23rd Aug., 1870.	C. Rankin.....	Water Lots, &c., Southampton.....	133 50	Miles. 100½
7...	4th Jan. & 5th Feb., 1870 ...	S. T. A. Evans.....	Timber Berths.....	2,143 68	
				7,929 28	

THOS. H. JOHNSON,
Assistant Commissioner.

SURVEYS BRANCH,
THOS. DEVINE,
Surveyor-in-Chief.

DEPARTMENT OF CROWN LANDS,
Toronto, 31st December, 1870.

APPENDIX No. 15.

STATEMENT OF CROWN LAND SURVEYS in progress, with amounts advanced thereon during the year up to the 31st December, 1870

No.	Date of Instruction.	Surveyor.	Surveys.	Amounts Advanced.
1	5th February, 1870.....	A. B. Scott	Survey of part of the Township of Wood	\$ cts.
2	5th February, 1870.....	A. B. Scott	" " Muskoka	1829 45
3	5th April, 1870.....	Henry Lillie.....	" Township of Chapman	1804 69
4	9th February, 1870.....	Moses McFadden	" " Croft	2175 00
5	7th February, 1870.....	A. B. Scott	" " Spence	750 00
6	11th April, 1870.....	T. R. Clementi	" " Ryerson	2451 90
7	3rd February, 1870.....	Forneri and Kennedy	" " McClure	2151 35
8	4th May, 1870.....	W. Beatty	" " McMurrich	755 32
9	18th June, 1870.....	W. Beatty	Exploration Lake Superior	7623 86
10	29th June, 1870.....	J. A. Fleming	" Lake Superior	6076 95
11	22nd August, 1870.....	C. F. Miles	Part Township of McMurrich	500 00
12	30th November, 1870.....	C. F. Miles	Part Township of Stephenson	None.
13	19th January, 1870.....	W. Beatty	Timber Berthis, Lake Huron	1739 50
14	23rd August, 1870.....	Wm. Bell	" Petteawaue River	1200 00
15	12th October, 1870.....	R. Hamilton.....	" Lake Nipissing	400 00
16	19th November, 1870.....	Wm. Bell	" Petteawaue River	None.
17	23rd November, 1870.....	V. B. Wadsworth	" " Severn River	None.
18	24th December, 1870.....	V. B. Wadsworth	Examination Survey of part of Keswick Town Plot	None.
19	12th October, 1868.....	W. Beatty	Townships of Chafey and Stisted	120 00
20	14th November, 1869.....	Forneri and Kennedy	Township of Faraday	2092 70
21	16th November, 1870.....	Thos. Byrne.....	Township of Monteth	400 00
				\$32070 72

THOS. H. JOHNSON,
Assistant Commissioner.

SURVEYS BRANCH,
THOS. DEVINE,
Surveyor-in-Chief.

DEPARTMENT OF CROWN LANDS,
Toronto, 31st December, 1870.

APPENDIX No. 16.

STATEMENT OF MUNICIPAL SURVEYS for which Instructions were issued during the year ending 31st December, 1870.

No.	Surveyor.	No. and date of Instructions.	Description of Survey.
1	Charles Unwin	298 26th January 1870.	Part of the 1st cross concession of Willoughby
2	F. L. Foster	299 4th April	Line between the 2nd and 3rd concessions, and 3rd concession and Burwell's survey, Sandwich East
3	Alfred Willson	300 25th May	Plant monuments at the S. E. angle of lot No. 11, and N. E. and S. E. angles of lot No. 10, 7th concession, East Gwillimbury
4	C. J. unning	301 6th June	Lots Nos. 18 to 31 inclusive, 8th concession, of the Township of Darlington
5	Will: McMillan	302 6th June	Lots Nos. 12 to 18 in 5th concession, N. Dorchester, and place monuments at the front angles thereof
6	John aiers	303 18th June	Lots Nos. 17 and 18, 1st concession, Pickering, and place monuments at front and rear angles thereof
7	J. aneis	304 11th August	Line between 12th and 13th concessions, from side road between 19 and 20, to Lake St. Clair, &c., Dover East
8	J. DeCaw	305 7th September	Lots Nos. 33 and 34, 1st and 2nd concessions, L. E. Bertie, and plant monuments at front and rear angles thereof
9	J. Shier	306 7th September	Lots Nos. 23 and 24 in 8th concession, Pickering, and plant posts at front and rear angles thereof
10	J. J. Francis	307 7th September	Line between Moore and Sombra, and plant posts therein
11	J. J. Jones	308 7th September	Line between 3rd and 4th concessions of Plympton
12	J. O. Wood	309 7th September	Line between 10th and 11th concessions, Osgoode, from lot No. 12 to northern boundary, &c.
13	C. G. Hanning	310 14th September	Lots Nos. 6 and 7 in 6th concessions, Darlington, and plant monuments at front and rear angles thereof
14	J. Shier	311 30th November	Lots Nos. 25, 26, 27, and 28, in 9th concession, Pickering, and to plant monuments at the front and rear angles thereof
15	C. G. Hanning	312 24th December	Lots Nos. 1, 2, 3, 4, and 5, in the 8th concession of Darlington

THOS. H. JOHNSON,
Assistant Commissioner.

SURVEYS BRANCH,
THOS. DEVINE,
Surveyor-in-Chief.

DEPARTMENT OF CROWN LANDS,
Toronto, 31st December, 1870.

APPENDIX No. 17.

STATEMENT of Municipal Surveys confirmed during the year ending the 31st December, 1870.

No.	Surveyor.	No. and date of Instructions.	SURVEY.	Date when confirmed.
1...	H. O. Wood.....	246 24th December, 1866.	Line between the 11th and 12th concessions, Finch	1870.
2...	H. D. Lumsden	279 1st February, 1869 ...	Line between the 4th and 5th concessions, Eldon	1st August.
3...	E. C. Caddy	289 11th August, 1869 ...	Survey of lots in 7th concession of Hamilton	16th August.
4...	J. Shier.....	293 13th October, 1869 ...	Lots Nos. 19 to 22 in 7th concession of Pickering	27th January.
5...	H. Creswick....	296 30th December, 1869.	14th and 15th concessions, W. Gwilliambury	20th May.
6...	B. Springer	297 30th December, 1869.	10th concession line, South Norwich	4th February.
7...	F. L. Foster	299 4th April, 1869	Line between 2nd and 3rd concessions, and line in rear of 3rd concession of Sandwich East	23rd July.
8...	A. Willson	300 25th May, 1870	Lots Nos. 10 and 11 in 7th concession, East Gwilliambury	1st November.
9...	C. G. Hanning....	301 6th June, 1870	Lots Nos. 18 to 31 in the 8th concession, Darlington	25th August.
10...	E. DeCew	305 7th September, 1870.	Lots Nos. 33 and 34 in 1st and 2nd concessions, from Lake Erie, Bertie	13th December.
				1st November.

THOS. H. JOHNSON,
Assistant Commissioner.

SURVEYS BRANCH,
THOMAS DEVINE,
Surveyor-in-Chief.

DEPARTMENT OF CROWN LANDS,
Toronto, 31st December, 1870.

APPENDIX No. 18.

Mining Licenses which have issued in Lake Superior Mining Division, from 23rd May to 31st October, 1870.

				Fees. \$ cts. 5 00
25th May, 1870	John Hamilton	One hundred feet on the Silver Vein near Thunder Cape		5 00
Do do	David Hamilton	Do do do		5 00
2nd June, 1870	Joseph Wilson	Two hundred by one hundred feet west of Silver Islet		5 00
20th June, 1870	William B. Frue	Do do do		5 00
Do do	Duncan Lourie	Do do do		5 00
28th do	Thomas Ryan	Do do do		5 00
22nd August, 1870	Ambrose Surratt	Do do do		5 00
3rd September, 1870	C. H. Palmer, jun.	Do do do		5 00
23rd September, 1870	Robert Holmes	Do do do		5 00
Fees from Messrs. J. M. Hamilton, Joseph Wilson, H. B. Frue, and M. Biggar for Registry Claims.				80
Fees from Alex. Cameron, J. M. Hamilton, and David Hamilton for Registry Claims				3 00
				48 80

THOS. H. JOHNSON,
Assistant Commissioner.

SURVEYS BRANCH,
THOS. DEVINE,
Surveyor-in-Chief.

DEPARTMENT OF CROWN LANDS,
Toronto, 31st December, 1870.

APPENDIX No. 19.
DEPARTMENT OF CROWN LANDS.
STATEMENT of Letters registered in the Department of Crown Lands during the year 1870.

Sales and Free Grants.	Accounts.	Woods and Forests.	Surveys.	Colonization Roads.	Transferred to other Departments.	Total.	Names Indexed.	Enclosures.	Orders in Council.	Returned Letters uncalled for at address.
9191	2363	2676	732	451	65	15478	21060	23000	55	113

JOHN MORPHY,
Registrar.

THOS. H. JOHNSON,
Assistant Commissioner.

DEPARTMENT OF CROWN LANDS,
Toronto. 31st December, 1870.

APPENDIX No. 20.

REPORT UPON COLONIZATION ROADS FOR THE YEAR 1870.

To the Hon. S. RICHARDS,
Commissioner of Crown Lands.

SIR,—I have the honor to report to you in detail, the operations of your Department, in the expenditure of the Legislative grant for Colonization Roads of \$50,000, for the year 1870.

The expenditure has been distributed over large sections of the Province, extending from Parry Sound, to the Ottawa River, and the works consist of the formation of new roads, the repair of others already existing, and the erection of necessary bridges, and are as follows :—

1.—NORTHERN ROAD.

This road, commencing at the waters of the Parry Sound Harbour, is now prolonged in a northerly direction to the Maganetewan River, a distance of 31·5 miles.

The work performed this season, consists of the construction of 5·5 miles, at a cost of \$2,750. The work has been performed under contract. It has been paid for with the exception of \$100, reserved until the more perfect completion of a small portion of the distance by the contractor.

An important line of settlement is being established throughout the length of this road.

Expenditure upon the new road	\$2,650 00
A balance has also been paid due on last year's contract, now completed	200 00
Total expenditure for 1870.....	\$2,850 00

2.—JUNCTION ROAD, No. 1.

This is a cheap style of road, made as a lateral offshoot from the Northern road, to promote settlement in more promising portions of land. It commences at Owl's Lake, on the latter road, and crosses in an easterly direction the townships of McKellar and Spence, terminating at its intersection with the Rousseau and Nipissing road, near Aumick Lake, on the Maganetewan River. It has been located throughout a distance of 17 miles.

Five miles of the westerly end have been built by contract, at the rate of \$200 per mile.	
Expenditure for construction	\$1,000 00
do do location	120 00
Total expenditure for 1870.....	\$1,120 00

3.—JUNCTION ROAD, No. 2.

This is another road of a similar description to the one last named.

It commences at lot 13, in the 12th concession of McDougall, on the Northern road and passes in a south easterly direction to the Seguin River, which it crosses near the Town line at the front of the 8th concession.

It has been located and made 5 miles. Many of the lots through and near which this road passes, have been settled upon this year.

Expenditure in construction of road	\$1,000 00
do locating 5 miles.....	50 00

Total expenditure for 1870..... \$1,050 00

4.—JUNCTION ROAD, No. 3.

Another road of the same character as the above two, has been merely located 3·5 miles.

It runs from near the intersection of the Northern road, with the east boundary of the township of Hagerman, in an easterly direction, to a west bay of Aumick Lake.

No work has been done yet towards the formation of the road.

Expenditure for the above location \$50 00

5.—PARRY SOUND ROAD.

The expenditure made upon this road, has been with a view to repair the same throughout its entire length, from the Parry Sound Village, to the intersection with the Muskoka road, about seven miles north of Bracebridge.

The whole length of this road is about 44 miles. The improvements have consisted of crossway repairs, removal of stones, ditching, brushing, grading, and in one or two instances of deviations to avoid bad hills.

The total cost of works including carts, scrapers, &c., has been..... \$2,110 98

Upon this outlay, there has been paid by this Department..... 1,985 14

6.—LAKE JOSEPH ROAD—NORTH.

This is a short road leading southward from the Parry Sound road, about six miles west of Rousseau Junction, to a small bay on Lake Joseph. It is about 2·5 miles in length.

The principal object in building it, is to afford accommodation to the settlers in its vicinity to reach Lake Joseph, at a point where a wharf and landing can be formed for the steamers, which are expected to ply next season from Port Carling through and around Lake Joseph.

Total expenditure in construction \$477 50

7.—ROUSSEAU AND NIPISSING ROAD.

This road which leads from the head of Lake Rousseau to Lake Nipissing, intersecting the Parry Sound road at the 22nd mile of the latter, just half way between Parry Sound and the Muskoka road, has been prolonged this season about 12 miles.

The road now, may be said to be completed to about the end of the 22nd mile, and is further partially made to the 26th mile.

Some portions of the latter distance, will require a very considerable amount of expenditure yet to complete the road and render the same available for travel.

The total expenditure for 1870, is \$8,627 39

A small portion of the above amount has been spent in improving the northerly part of first 12 miles constructed in the year 1867.

Settlement is rapidly advancing upon this road, and as the best sections of the country are only now being reached, it is anticipated that a very great improvement in this respect, will be realized during the ensuing year.

8.—SKELETON LAKE ROAD.

This is a line of communication leading from a postal point on Lake Rousseau, called Windermere, north eastward by the way of Three Mile Lake, thence across the Parry Sound Road to the western-most bay of Skeleton Lake, about six miles in length.

The above route had been indicated and partially improved by the settlers through voluntary labour.

Six hundred dollars were appropriated by the Government towards opening up the road, and a contract was let on the 2nd November last, for the clearing and levelling of the same, according to Departmental Specification No. 2, for the construction of cheap winter roads.

Under this contract, the work has been reported completed by the contractor, but too late to admit of a satisfactory examination of it.

There has been paid to the contractor on account \$187 73

9.—MUSKOKA ROAD.

The improvements upon this road this season, have been confined to the north-eastern end of the road.

One considerable deviation, extending nearly southward from Lake Vernon, about one mile in length, has been substantially made. It results in the avoidance of some very rugged and difficult short hills.

From Fetterley's, at Vernon Lake, the road extends nearly due east, for the distance of nearly three miles, where it crosses the North Branch of Muskoka River, between Vernon and Fairy Lakes. This portion of the road was partially made last year. Some additional improvements have been made this year, in the shape of underbrushing and clearing the track, but the road is still in a rough and very unfinished condition.

At the intersection of the river, at the end of the last described distance, a substantial pier bridge has been erected, and it is here that the principal outlay has been made.

The total expenditure upon the bridge and road this season is..... \$1,701 44

Paid also balance due A. Cameron, in 1869..... 25 00

Total expenditure for 1870..... \$1,726 44

Very favorable reports of the good quality of the land in the central and north-west parts of the township of Chaffey, having reached this department, it was intended to have prolonged this road some miles beyond the bridge site alluded to, so as to have reached the same. The slow progress made by the road party, however, and the expenditure made upon the bridge, rendered the intention abortive this season.

10.—LAKE JOSEPH ROAD, SECTION 1.

This section is an entirely new road, made under Specification No. 2.

A change of this part of the road having been petitioned for, and approved, after examination made, the new route was adopted. The road has been satisfactorily completed under contract and paid for.

Total expenditure (5.5 miles) has been\$1,068 41.

The Lake Joseph road now commences about 25 chains south of the Falkenburgh Post Office, on the Muskoka road.

11.—LAKE JOSEPH ROAD, SECTION 2.

The work on this section performed this year, is the completion of Mr. Moore's contract of last year, for building the same (five miles), under Specification No. 2.

The work is finished and accepted.

Total expenditure in 1870..... \$306 85

12.—BRUNEL ROAD.

No extension of this road has taken place this year. An excellent bridge has been constructed on the 4th mile, where the road crosses the North Branch of the Muskoka river. The length of the bridge exceeds 400 feet.

It is floored throughout with good sound 3 inch plank.

The water way is spanned by two queen posts trusses of 60 feet bays, furnished with 1½ inch bar iron suspension bolts.

The water piers are three in number. Timbers sawn, 12 + 12, double dovetailed, well tied and filled to the top ties with stone. They are all formed with cut water fronts, faced with boiler plate iron. Stringers four in number, 12 + 15 sustained between piers with double trimmer beams, 12 + 15.

Height of stringers above low water mark, nine feet.

The total cost of this bridge including some levelling and clearing is, \$1,212 00.

About 40 settlers are located beyond this bridge, on the Brunel road, who, through the above improvement, are furnished with a safe and easy passage across the river, which has hitherto been a serious impediment to settlement in Brunel Township.

13.—MONCK ROAD—WEST.

This road has been prolonged about eight miles further this season. It reaches now to the middle of Dalton township, and has been constructed from its commencement at the Rama road, near the Conchiching Lake, a total distance of about 18 miles.

The total cost of improvements made this season is, \$4,600 83

14.—VICTORIA ROAD.

Three hundred dollars were appropriated this year, for some further repairs upon the above road, to be expended under the management of the Municipality, in connection with a like sum voted by the County Council.

These united sums have been laid out in general repairs along the middle and northern portions of the road, and a report of the expenditure in detail, has been furnished to this Department.

Total expenditure by the Department in 1870..... \$300 00

15.—FENELON AND KINMOUNT ROAD.

This is a new road originally laid out for the convenience of settlers in Somerville Township.

It leads from the village of Fenelon Falls, to the village of Kinmount, on the Bobcaygeon road.

For the improvement of this road as a summer road, the Government appropriated \$1000, to be expended in conjunction with a like sum to be contributed by the lumbermen of the district and the county of Victoria. The road has been much improved over the greater portion of its length, and has been reported by the overseer, as being now in a very passable condition.

Total expenditure by the Department..... \$1,000 00

16.—BOBCAYGEON ROAD.

A fund amounting to \$10,000, was provided for the general improvement of this road, to extend from the village of Bobcaygeon, to the intersection of the line, with the Peterson road, a distance of about 38 miles. The Government appropriated by agreement, towards the above amount,..... \$4,000 00

The Lumbermen of the District..... 2,000 00

The County of Victoria..... 2,000 00

And the County of Peterboro' 2,000 00

Total..... \$10,000 00

The final account and report of the total expenditure of the season, has not yet been furnished to this Department.

Total expenditure by the Department..... \$4,000 00

17.—MONCK ROAD—EAST.

This section of the Monck road, has been prolonged this season eleven and a half miles. Its total length now from the Bobcaygeon road eastward in continuous improvement is about $21\frac{1}{2}$ miles.

This part of the road now reaches to within about 1.5 miles of the easterly boundary of Glamorgan, and there remains probably some 15 miles of unconstructed line yet to complete the Monck Road as one continuous improvement from the Bobcaygeon road to the Hastings road.

The total expenditure this year on this part of the Monck road is... \$5,983 16

18.—BURLEIGH ROAD.

Some general repairs have been made this season, (chiefly upon the southern part,) on this road.

The Government appropriated the sum of \$500 towards this object and the municipality a like sum, while the overseer reports an expenditure, in excess of the above amounts, of \$307.39.

Total Expenditure by Department..... \$500 00

19.—HASTINGS ROAD.

The Hastings road has been repaired, from the Jordan Creek in the Township of Tudor to the north boundary line of Wicklow, to as great an extent as practicable with an appropriation of \$2,500.

The improvements have consisted chiefly in the repair of broken crossways, side ditching and the removal of stones. Some small deviations for a better line have also been made, and a few hills have been reduced in their grades.

The main work, of a continuous nature, has been done along the boundary of Wicklow township to the northward of Maynooth Post Office, which section was for the most part in an impassable condition, having never received any additional improvement, since its first construction in 1854-1861. This part of the road is now reported to be in a very tolerable state for travel.

Total expenditure in 1870..... \$2,500 00

20.—MISSISSIPPI ROAD.

One and a fourth miles of new road have been constructed on the west end of this line, to connect the same with the new Hastings Road, and also to form a continuous line of travel with the Monck Road, which forms its eastern terminus at the same intersection. The bridge on this road, which crosses the York branch of the Madawaska river near the locality in question, has also been repaired having been damaged to some extent by last spring's floods.

Expenditure on the road..... \$500 00

Do in repairing bridge..... 100 00

Total expenditure..... \$600 00

21.—MONCK ROAD—EAST (*New Bridge*).

The Monck Road east terminates at the intersection of the York river along the east bank of which the Hastings road runs.

A substantial bridge has been built this year across the above river, affording a necessary connection with the latter road, and thus perfecting the communication.

The bridge and roadway is supported upon strong crib piers, well loaded with stone, having a substantial three inch plank flooring, and strong hand-rail.

Total expenditure on bridge..... \$647 17

22.—ADDINGTON ROAD.

The repairs upon this road, which last year had been prolonged as far as the head of Massanoga Lake, have been continued this season to the intersection of the Mississippi Road, about eleven miles, and the Addington Road is now reported to be in a very tolerable condition for travel as far as the latter point.

The Total expenditure this year is..... \$1,001 25

23.—LOBORO' AND BEDFORD ROAD.

This road leads from Sydenham, in Loboro', to Fermoy, in Bedford.

The sum of \$1,000 was appropriated to assist the Municipality in repairing it. The overseer reports the improvement done to the entire satisfaction of the Reeve (with whom he was directed to consult with reference to the repairs most required) and the community generally.

General repairs have been effected from the 8th Concession of Loboro' to the village of Fermoy, in the township of Bedford.

Total expenditure this year..... \$1,000 00

24.—PEMBROKE AND MATTAWAN ROAD.

This road had been extended, previous to this year, as far as William McConnell's farm, about 25 miles from the Petewawa River, and has been continued this season altogether a distance of 13.5 miles.

Five and a quarter miles of which distance from the point of commencement have been made a good summer road, and the remainder of the total distance, viz., eight and a quarter miles, has been constructed as a winter road.

These improvements, according to the report of the Overseer, now reach as far as French's, or 38½ miles from the Petewawa Bridge, where the Pembroke and Mattawa Road may be said to commence.

The Total cost of improvements done this year, as per account rendered, is \$4,821.31, upon which amount there has been paid on account \$4,600 00

25.—PEMBROKE AND EGANVILLE ROAD.

This road leads from the town of Pembroke to the village of Eganville.

An appropriation of \$500 was made by the Government, in addition to the same amount contributed by the settlers of the district, to open and improve the line. The improvement effected by the expenditure of the above amount, it is believed, is a judicious and beneficial one.

The Overseer reports over two miles of road well graded and finished.

Expenditure by department..... \$499 28

26.—INDIAN RIVER BRIDGE.

This improvement is in the township of Alice, upon a road crossing the Indian River, over which stream the above bridge is built.

The work was let by contract. It has been examined and is considered a satisfactory structure.

Contract Price \$350 00
Paid on account thereof 250 00

The above embraces all the road works effected during the year, 1870, and the following is a classification of the same.

ROADS.

Number of miles of new road made..... 79.5
Number of miles of roads repaired..... 205.0

Total miles of road operated on in 1870..... 284.5

BRIDGES BUILT AND REPAIRED.

Brunel bridge, new, cost.....	\$1,212 00
Monck—East bridge, new, cost.....	647 17
Muskoka road, new, cost, say.....	900 00
Indian river bridge, new, cost.....	350 00
Gull river (in Minden), unreturned.....	
Burnt river (in Glanmorgan), say.....	400 00
Repair to York river bridge.....	100 00
Total expended on bridges.....	\$3,609 17

RECAPITULATION OF FOREGOING EXPENDITURE, WITH *INSPECTION EXPENSES AND DEPARTMENTAL SALARY ADDED.

1.—Northern road.....	\$2,850 00
2.—Junction No. 1.....	1,120 00
3.—Junction No. 2.....	1,050 00
4.—Junction No. 3.....	50 00
5.—Parry Sound.....	1,985 14
6.—Lake Joseph, North.....	477 50
7.—Rousseau and Nipissing.....	8,627 39
8.—Skeleton Lake.....	187 73
9.—Muskoka.....	1,726 44
10.—Lake Joseph, Section 1... ..	1,068 41
11.—Lake Joseph, Section 2.....	306 85
12.—Brunel bridge.....	1,212 00
13.—Monck, West, road.....	4,600 83
14.—Victoria “.....	300 00
15.—Fenelon and Kinmount road.....	1,000 00
16.—Bobcageon “.....	4,000 00
17.—Monck, East “.....	5,983 16
18.—Burleigh “.....	500 00
19.—Hastings “.....	2,500 00
20.—Mississippi “.....	600 00
21.—Monck Road East, (New Bridge).....	647 17
22.—Addington “.....	1,001 00
23.—Loboro' and Bedford “.....	1,000 00
24.—Pembroke and Mattawan road.....	4,600 00
25.—Pembroke and Eganville “.....	499 28
26.—Indian river bridge.....	250 00
*Inspection, Expenses and Departmental salary.....	1,856 85
Total expenditure.....	\$50,000 00

Respectfully submitted,

J. W. BRIDGLAND,

Supert. Colonization Roads, Ontario.

DEPARTMENT OF CROWN LANDS. Dec. 31st. 1870.

APPENDIX No. 21.

REPORT OF THE INSPECTOR, MADOC MINING DIVISION.

INSPECTOR'S OFFICE, MADOC G. M. DIVISION,
BELLEVILLE, 16th September, 1870.

To. the Hon. S. RICHARDS,
Commissioner of Crown Lands.

SIR,—I have the honour to report for your information the following facts respecting the present state of Gold Mining enterprise in the Madoc Gold Mining Division :—

1st. Cook Mine.—Lot No. 7, in the 9th concession, of the township of Marmora. This Company has been at work since last fall, and now employs (14) fourteen men, which number will be shortly increased to (20) twenty. The mine consists of a shaft about (60) sixty feet deep from the bottom of which a drift has been run a distance of (40) forty feet to the northward. The vein at this depth is nearly (5) five feet wide and consists of glassy quartz with arsenical iron pyrites. It now affords many fine shows of visible gold, and is in appearance richer than at first. The mill, which was put up at first in the township of Barrie, whence it was removed to its present site, stands on the bank of the River Moira, and contains a battery of (5) five stamps, a grinding pan, amalgamating pan, seven-foot settler, and shoots lined with blanket for concentration. It is run by a steam engine, and the capacity of the stamps is (4) four tons in 24 hours. The quantity of ore that has been run through this mill since its erection on its present site is close upon (500) five hundred tons; the major part of which has yielded gold at the rate of (\$11.00) eleven dollars per ton, at a calculated expense of (\$6.00) six dollars per ton for mining and milling.

2nd. Gilbert & Co. ("Gillen Mine.") This mine is situated on lot No. 6, in the 8th concession of Marmora, within a few rods of the Cook Mine, and on the same or a similar vein. No shaft has been sunk as yet; all the ore having been taken from an open cutting, about 10 feet deep, stretching along the course of the vein. The Mill stands about (40) forty rods up the river from the Cook Mill, and is of about the same capacity and construction. It is run by a water-wheel; but has not worked any this season, the dam having been carried away by the spring freshet in the Moria. Owing to a dispute among the partners, it has not been rebuilt. There is in consequence no regular work going on in this mine; but some of the partners have had (100) one hundred tons of ore taken out by contract, which is now being worked as a test in the Cook Mill. The operator, Mr. Jenkins, considers the show good so far as it has gone. The contract price per ton for taking out the ore, and raising it to the surface is (\$1.50) one dollar and fifty cents per ton. The ore as taken from the mine affords plentiful shows of gold to the naked eye.

3rd. Road allowance between the 8th and 9th concessions of Marmora, at lot 8. Here a man named Boardman with his wife and son, has been for some time past at work under a lease from the township Council of Marmora, washing out gold from the surface soil. Last week they struck a "pocket," from which they "panned" out over (\$60.00) sixty dollars worth of gold in two days. The samples they had were from coarse to "flour" gold, and very rich.

4th. Lot 9, in the 8th concession, a gentleman named Gatling, from the United States, has bought part of this lot as well as of lots 10 in the 8th and 9th concessions. He has got a shaft down about (15) fifteen feet on a vein of arsenical iron ore, and has a fair show for gold. He is putting up a house for himself and another for his men, besides a mining shanty and blacksmith shop.

5th. Lot 10, in the 8th concession, a Mr. Jones, also from the States, has bought part of this lot from Mr. Gatling. He has but lately begun to mine, but is opening on a vein which already shews gold by crushing and washing.

6th. The Feigel Mine, lot 16, in the 11th concession of Marmora, near Malone, P.O. This mine was rich for a time, but is now exhausted.

7th. The Severn Mill, near the above on the West side of the Moira River. This Mill since its erection has been chiefly employed in working ore from the Feigel Mine. I am informed that more than (\$4000.00) four thousand dollars in gold have been taken out by this Mill. It has been out of repair and unused for some time past ; but last week Mr. W. H. Palmer ran through it an experimental crushing of (10) ten tons of ore from a vein of quartz with arsenical iron from a plot of ground he has leased in the vicinity. I have not learned the result ; but he was very sanguine as to the richness of the ore.

8th. Mill on Powell's lot 17, in the 11th concession. This Mill was recently moved to its present site from the "Bay State" Mine, in Madoc. It stands on the east side of the Moira River, directly opposite to the Severn Mill, but is not working at present.

9th. Phoenix Mine (Old Richardson Mine), lot 18, in the 5th concession of Madoc. The old shaft of this mine is not now used. Last summer, Mr. Dunstan, the manager, commenced to sink a new shaft (200) two hundred feet further down the hill expecting to strike the lode at a depth of some (120) one hundred and twenty feet. After sinking to (60) sixty feet, however, the miners struck a spring and the shaft has now (40) forty feet of water in it. A pump has been rigged to work by horse power, and it is expected that a week or ten days will suffice to free the mine of water, so that the sinking can be proceeded with.

10th. The "Anglo-Saxon" Mill, Madoc, comprises a Blake crusher, (30) thirty stamps, 3 grinding pans and (30) thirty Wye koff oscillating amalgamators, the most powerful mill in the country. No work doing here.

11th. Toronto and Whitby Company's Mine and Mill, Bannock Burn, Madoc. Not working.

12th. "Empire Mine," village of Madoc, grey copper ore, carrying both gold and silver. Rich, abandoned.

13th. Smelting Works, in the 11th concession of Hungerford. Messrs. Jones & Robbins have abandoned their mine and furnaces, and removed their crushing machinery to Colorado.

14th. Barry Mine, lot 5, in the 2nd concession of Elzevir. This company have remodelled their mill, putting in some new machinery, and re-built their dam, which suffered in the spring freshet.

They have (40) forty tons of ore lying at the mill, ready for crushing, and a further quantity at the mine.

It is very white quartz with very little sulphurets, and is reputed very rich ; but black creek is nearly dry, and they are waiting for rain to enable them to commence operations.

15th. Bridgewater, Elzevir. No mining work has been done here for some time. The flood in the spring exposed a five feet vein of quartz, with abundant sulphurets and some shews of gold in the River Bank. It is considered very promising, and the proprietor, Hon. B. Flint, intends to have a few tons crushed at the Barry Mill as soon as possible, to test its value.

Judging from the above recorded facts, and from the appearances presented by the several veins, which are now being, or about to be worked, no less than from the confidence expressed by experienced miners, who have clung to the district through good report and evil report in the face of great discouragement, I think I am justified in anticipating that the pursuit of goldmining in this locality, though far from fulfilling the extravagant expectations entertained on the first discovery of the precious metals in the County of Hastings, will yet constitute an important and profitable branch of industry for many years, and perhaps for many generations to come.

I have the honour to be, sir,

Your obedient servant,

ALFRED A. CAMPBELL.

Inspector, M.G.M.D.

APPENDIX, No. 22.

REPORT OF THE MINING INSPECTOR, NORTH SHORE OF LAKE SUPERIOR.

THUNDER BAY, LAKE SUPERIOR,
30th November, 1870.To the Hon. S. RICHARDS,
Commissioner of Crown Lands.

SIR,—The close of the navigation having brought to a conclusion the explorations and mining operations of another season, I have the honor to submit to you the following brief report and observations thereon.

A period of twenty-four years has elapsed since the attention of the people of Canada was for the first time particularly directed to the north shores of Lakes Huron and Superior, and to the existence there of at least the baser metals in such quantity as would ensure ample returns to all who might invest their money in mineral lands, if not in actual mining operations. It was the discovery of native or metallic copper on the south shore of Lake Superior in quantities previously unheard of and unknown in other parts of the world, that gave rise to the conviction that rich and valuable mines would be found on our side also. The Government was consequently urged to frame and establish a liberal code of rules and regulations under which explorations might be carried on, mineral lands might be purchased and mines successfully worked. A history of the legislation on this subject, of the companies organized, and of the mining operations carried on during the past twenty-four years with the causes of the unsatisfactory result of such mining operations generally, might not be uninteresting but would be too lengthy for, if not out of place, in such a report as this. I may be allowed, however, briefly to say that whereas legislation formerly commencing as it did with locations of ten square miles in extent, closed our shore against independent explorers and miners almost entirely, and left the exploration of the country to companies and their employees, it has latterly been more favorable thereto, and that the general mining act of 1869 passed by the present Legislature and now in force, leaves the practical explorer and miner little or nothing to complain of.

Until recently copper was the metal which constituted the principal object of search in this district. It is distributed over an area or extent of country large even where all else is on so large a scale. Veins containing either the ores of copper or that metal in its native state have been found at short intervals from the Wallace Mine, nearly half way down Lake Huron to Pigeon River on Lake Superior, or over a distance of at least four hundred and fifty miles. How far inland the copper bearing rocks extend has not been fully determined, but I have myself seen what under more favorable circumstances would be considered fine valuable veins of copper from fifteen to twenty miles inland, and have little doubt that the copper region extends at many points as far north as the height of land. Of this vast region a mere fringe along the shores of Lakes Huron and Superior has been examined or explored and that in a very superficial manner. These explorations however limited and imperfect as they may be, proved that an amazing quantity of copper is undoubtedly stored up in this portion of the Dominion of Canada. On the other hand the mining operations carried on during the last twenty-four years limited as they have been would appear to warrant the apprehension at least that under hitherto existing circumstances and conditions as regards the price of copper, rates of labor, and cost of transport to market, the mining of copper in this district is not a profitable pursuit. That veins of copper exceptionally rich may be discovered and profitably worked, the success of the Wellington Mine fully proves, and there is no reason why other mines as rich should not occasionally be found. But it is not the less certain that so long as the price of copper continues as low as it has been for several years past and so long as the rates of wages hitherto current, and cost of transport to market are unreduced, so long will the extraction of the copper and copper ores from a vast majority of the veins in the region alluded to be found to be unremunerative. In time the price of copper will probably advance. The produce of the North West may pass this way, food would in that case be abundant and cheap and miners could work for less wages. Again certain methods or processes whereby

it is proposed to extract the metallic copper from its ores at the mines instead of shipping it as has hitherto been done to Wales and other distant parts to be there smelted, have been discovered and are being rapidly perfected. One such method is being now introduced at the Bruce and Wellington Mines in this District on a very extensive scale and with every hope of success. Another new process has lately been patented by Dr. T. Sterry Hunt of the Geological Survey of Canada, which is in use at the Harvey Hill Mine in Leeds near Quebec, and claims to be still more economical and complete.

When we consider that it is hoped and expected that by means of these methods or processes: 1. The cost of transport to market will be reduced to about one-fourth or one-fifth of what it has hitherto been.

2. That as much probably as twenty per cent. of metal hitherto lost in the dressing and smelting operations will be saved, the importance of these discoveries and of their successful introduction into a mining region so remote as this cannot be over estimated. We need not therefore yet despair that the copper distributed so generally over this vast tract of country, and in the aggregate inconceivable in quantity may not at some future and perhaps not distant period be largely and profitably extracted, and copper mining become one of the most flourishing and important industries of this Province.

The existence of silver on both the north and south shores of Lake Superior has been known for many years, on the south shore it is found associated with the native copper in many if not in all of the mines, and some have produced quite a considerable quantity. Near Marquette it was found associated with lead ore or Galena. In no case, however, would it appear to have been sufficiently rich to admit of the veins being worked, for the silver alone irrespective of the other metals associated with it. On the north shore it had been found at Mamainse, Michipicoten Island, St. Ignace and Princes Bay, and possibly many other places unknown to me. Many years indeed before the excitement about copper arose on this lake, a French Canadian voyageur in the service of Captain Bayfield, is supposed to have discovered silver in this Thunder Bay. At a time when silver mines at all events were little thought of, this man asserted that he had found it here. So satisfied were several parties at the Bruce Mines of his sincerity that an expedition was fitted out in the year 1852 and sent up to see the vein with intention of securing and working it. Secord as the man was called, brought the party to Thunder Bay, but once there his memory would appear to have failed him as to the exact spot, and the party returned disappointed and for the most part, fully persuaded that he had deceived them. Poor and despised the unfortunate man committed suicide some time afterwards, the disappointment having doubtless preyed upon and affected his mind. The events of the last three or four years render it exceedingly probable that poor Secord really found silver in Thunder Bay as he asserted he had done, when Captain Bayfield was engaged in the survey of Lake Superior, and should vindicate his memory from suspicions which were in all likelihood unjust.

As regards the silver lodes or veins and the operations carried on here, I may state shortly that although there has been a great deal of talking and writing and a good deal of money spent, there has in fact been very little done as yet to test or prove the real value, extent and permanence of any of the veins found in this mining division. The mining operations are too superficial as yet to warrant any positive opinions or statements on the subject. Silver bearing veins have been discovered in ten or twelve different localities between Thunder Cape and Pigeon River indicating a field sufficiently extensive to constitute a very important silver mining region, should the lodes or veins turn out well in depth. None of the veins have been sunk upon to a greater depth than sixty feet or ten fathoms, a depth very inconsiderable in a mining point of view. We have beyond doubt veins containing very rich bunches or pockets of silver at or near the surface. That near Silver Islet, Thunder Cape, has produced this fall, a quantity of ore which if nearly so rich as reported, places it in the meantime in the foremost rank of silver producing mines, and although the depth yet attained does not exceed ten or twelve feet, it is said to be as rich if not richer in the bottom of the slope than it was at the surface. Whether any considerable number of these silver veins will sustain profitable mining operations carried on by a large force of miners and extended over a long term of years, like many such in Europe, remains to be seen. American capital enterprise and energy attracted

to our shores by the remarkable success which is attending on the operations of their countrymen at Thunder Cape, appear likely to solve that problem for us in a short time and to this end we should not only wish our enterprising neighbors good speed, but afford them every reasonable facility and encouragement in our power.

Referring to that portion of the general mining act of 1869, which relates to miners licenses and claims, I beg to observe that whereas I only issued three miners licenses last year, the number applied for and issued this year up to the date hereof is thirteen, showing at least an increasing desire for such. With the slight modification suggested in a previous letter, I think the system would be very acceptable and a boon to practical explorers and miners generally, a larger number of which class would I am persuaded take out miners licenses next year.

The existence of lead and of iron ores of such quality and in such quantity in this mining division as to be well worthy of attention is unquestionable, and I trust that we shall see mines of these metals also opened up and developed this next season.

I have the honor to be, Sir,

Your most obedient servant,

E. B. BORRON,
*Inspector of the Lake Superior
Mining Division.*

APPENDIX No. 23.

EXPLORATORY SURVEY, NORTH SHORE OF LAKE SUPERIOR.

Report of Walter Beatty, P.L.S., of Survey from Lake Nipigon and Easterly to the Pic River.

DELTA, 7th December, 1870

The Hon. S. RICHARDS,
The Commissioner of Crown Lands.

SIR,—Under your instructions, dated June 18th, 1870, I left Toronto for Lake Nipigon on the 21st of that month with a party of nineteen men including two chainbearers and two explorers and the requisite supplies. I arrived at Red Rock, at the mouth of the Nipigon River, on the 27th, and sent two men and half the supplies to the mouth of the Pic River, with instructions to obtain an Indian guide and go thence with supplies to a point on Long Lake, twenty miles north of P. L. S. Herrick's line, taking the H. B. Co.'s route to Long Lake House, thence up said lake to the place assigned, which duty they performed in a satisfactory manner. With the remainder of the party I ascended Nipigon River to Herrick's line and made a survey of the river from there to Lake Nipigon, and then surveyed the eastern shore of said lake as far as 50° N. lat.

In the meantime the men were forwarding supplies to the same point, which we reached on the 5th of August.

I then commenced survey of the Main Exploration Line running S. 51° 30' E. towards Long Lake.

While the remainder of the party were producing this line and making the required explorations right and left therefrom, I, in company with one man and an Indian guide, coasted the shore of the lake in a bark canoe, and examined the country to a distance of ten miles inland in the following places:—

1st. From the mouth of Ombabica River on the north-easterly shore of the lake; travelling eastward the country is level and swampy, broken by rocky ridges; soil sandy, timber—tamarac, spruce, balsam and alder.

2nd. From mouth of Picitigonching River on the north end of lake, travelling north, found the country level for some miles from the lake, then more or less broken by sandy hills and rocky ridges; soil and timber as before. On the 18th August we reached Nipigon House, one of the Hudson Bay Co's Posts. It is situated on the west shore of the lake at latitude 49° 55' north, or nearly opposite starting point of exploration line on the

east shore. When we arrived the Company's servants—Indians—were busy hay-making. The crop was very fair. I have rarely seen a better kitchen garden than the one at this post. Beets, carrots, parsnips, cabbage, tomatoes and potatoes, all looking well, thrifty gooseberries, currants, and all kinds of cherries. The soil is clay loam of very good quality.

3rd. Gull River, travelled in a south-easterly direction from the mouth of the river; country generally level and swampy, found some good land in Gull River Valley; came across two small Indian clearings, one about a mile up the river, the other about the same distance south of the river on the shore of Gull Bay, in both of which were good crops of potatoes.

4th. From south end of Black Sturgeon Bay, travelling westward; for the first three or four miles alternate burnt rocky ledges and swamp after this more level and swampy; timber—spruce, tamarac and balsam.

From Black Sturgeon Bay crossed the lake to Poplar Lodge at the mouth of Sturgeon river, on the east shore of the lake.

Lake Nipigon is about seventy miles long and thirty wide. It is dotted all over with islands, some of them of considerable extent; the coast line is very irregular, broken by peninsulas and bays, several of the latter extend from ten to twenty miles inland. Numerous kinds of fish of the finest quality abound in the lake and the streams flowing into it.

Nipigon River affords the finest trout fishing on the continent, the exception is to hook a trout weighing less than two pounds. As a rule, they are taken from two to five pounds in weight, and many even larger.

The land near the lake, except in the river valley, is very rough for the most part, a succession of rocky ledges from one to three hundred feet above the water. Most of the country near the lake on the east side, has been overrun by fire, giving it a very barren and inhospitable appearance.

The west side of the lake is not so rough, neither is there so much burnt land.

From Poplar Lodge Lake Nipigon I took Hudson Bay Company's canoe route to Long Lake House, on Long Lake at latitude $49^{\circ} 46' 30''$ N., distance seventy-five miles, of which sixty are water, and the remaining fifteen land portages.

In passing over this route I made a Track Survey, that is, I took the bearings with the compass and estimated the distances as I went along.

This canoe route leaves Lake Nipigon about twenty miles south of the exploration line and strikes Long Lake some forty miles north of it, thus making two exploratory lines across this part of the country.

The country from Lake Nipigon along the exploration line is composed mainly of high rocky ledges and swamps with little or no arable land.

On the canoe route, three quarters of which passes north of exploration line as you approach the height of land, the country becomes more level, and continues so to within a short distance of Long Lake. The timber on high lands is pitch pine, poplar and spruce; in the swamps, tamarac and spruce, and along the banks of creeks a few stunted black ash and cedar; soil sandy, varying in places from white to red; in the immediate vicinity of Long Lake House the soil is a stiff white clay, which, when well cultivated, yields a good crop, as is shown by the gardens around the post. The way in which these gardens are ploughed is this, a long rope is attached to an ordinary plough, and a dozen or more men taking hold of the rope make a good substitute for a team, and in a very short time turn over half an acre of garden, and call it sown.

From Long Lake House I followed the west shore of the lake southward until I found the men I had sent forward with supplies in June.

Professor R. W. Bell, of the Geological Survey, was engaged in making a survey of Long Lake. He had kindly shown my men where to locate their dépôt camp. I arrived at that place on the evening of the 12th September.

On the 14th September, the line party which I had sent in from the fiftieth parallel on Lake Nipigon came out to Long Lake within eight miles of the dépôt.

While the packers were resting themselves I took the axemen and chainbearers, went south to Herrick's line, and made a traverse of the lakes and streams between it and Long Lake, defining the height of land, with accuracy, at this point, and traversed Long Lake

northward to intersection of exploration line, which I found to be within ten chains of its proper position.

Long Lake is some fifty-three miles long, and varies from half a mile to four miles in width, and instead of crossing Herrick's line as he supposed, it does not reach within four and a half miles of it, the lake which he mistook for Long Lake being Cat Lake, which flows into Long Lake near its southern extremity.

On the 19th September started exploration line eastward from Long Lake ; sent one of the explorers with two men and part of the supplies round by Long Lake House to where the exploration line crossed the Pic River, and to make a track survey of that route and of the canoe route from McKay's Lake southward to exploration line ; this they did, meeting myself on the 8th October at the intersection of the said line with the Pic River.

The country from Long Lake to Pic River has mostly been overrun with fire, time and again. Its general character is rocky ledges and swamps, many of the former being quite barren, while others not quite so bad, produce a luxuriant growth of whortle berries. The timber on the uplands, where there is any depth of soil, is pitch pine, poplar (Aspen) and white birch ; in the swamps, spruce, tamarac and alder.

Along the Hudson Bay Company's canoe route from Long Lake House the country is generally level as you approach the height of land and beyond.

Continued the exploration line easterly across the Pic River some six miles, making in all one hundred and twenty miles of regularly surveyed base lines exclusive of the traverse of the before mentioned parts of Nipigon Lake and River, and the traverse from Herrick's line up Long Lake to my base line, making eighty-four miles sixty-four chains and ninety-six links of traverse or two hundred and four miles sixty-four chains and ninety-four links in all.

The country along the shore of Long Lake southward, is extremely rough.

Reached the mouth of Pic River, Lake Superior on the 21st of October, and Toronto on the 29th, at 11 o'clock a.m.

Thanks to the prompt manner in which my accounts were examined, I was enabled to pay off and discharge my men that afternoon.

During the season I crossed the Height of Land or boundary between the Hudson Bay Company and Ontario five or six times, and have laid it down on the map for a distance of over one hundred and fifty miles east from Lake Nipigon.

I do not think that a railway could be built, save at a great expense, much south of the water shed, but from personal observation and the best information I could obtain, I think few engineering difficulties would be found in carrying a line of road from the Pic River westward to the north end of Long Lake, and thence to Lake Nipigon, passing round the north end thereof. The main trouble would be to avoid small lakes, which are very numerous.

There is plenty of suitable timber for ties, bridging and firing.

I met Provincial Land Surveyor Fleming and his party, where his exploration line crossed the Pic River.

Before concluding allow me to express my thanks to the officers and servants of the Hudson Bay Company for their many kindnesses to myself and party during the season ; also to Prof. Bell, of the Geological Survey, and his party.

The north-west and south coasts of Lake Nipigon from the commencement of Base line to Nipigon River, are laid down from Prof. Bell's map of Geological Survey, checked by observation for latitude at different points.

I have the honor to be,

Sir,

Your obedient servant,

WALTER BEATTY,

P. L. Surveyor.

APPENDIX No. 24.

EXPLORATORY SURVEY, NORTH SHORE OF LAKE SUPERIOR

REPORT OF J. A. FLEMING, P. L. S., OF SURVEY FROM THE MICHIPICOTEN AND SHEQUAMKA RIVERS, WESTERLY TO THE PIC RIVER.

COLLINGWOOD, 30th December, 1870.

The Hon. S. RICHARDS,
The Commissioner of Crown Lands.

SIR,—In compliance with your instructions of June 29th last, I have the honor to report on my Exploratory Survey, made during the past season, of the tract of country extending upwards of fifty miles north of Lake Superior, and lying between the Michipicoten and Shequamka Rivers on the east, and Pic River on the west; embracing in that region an extent of survey of line, lake and river, of over five hundred miles, as will be observed by the accompanying Topographical Map, on which the general character of the country, the soil, the timber, and the topographical features are shown; together with the elevations of the numerous lakes, hills, valleys, and other ruling points in the interior.

The country near Lake Superior is generally rough and broken, with ranges of rocky hills, except in the valleys of the Michipicoten and the Magpie Rivers, and between Michipicoten River and Lake Wawangonk, where the land is level, and of a good alluvial sandy-loam, in some places prairie land, having been cleared by fire. There is a good level land also in the valley of the Shequamka River and Lake.

Between Lake Superior and Lake Matagoming, and the upper valley of the Magpie, north of Herrick's line, the land is generally undulating and rocky, but beyond that the land is comparatively level, with a soil of alluvial clay and sandy loam, with some groves of pine. The timber is generally white spruce, with red pine, birch, poplar and cedar.

In the Upper Magpie and Lake Esnogaming district, there is a good level land of a rich alluvial clay loam, well wooded.

From Lake Esnogaming westerly to White Lake the land is generally level, with a soil of sandy loam, in some places undulating and rocky, timbered with white spruce, red pine, birch, poplar and cedar.

In the White River valley there is excellent farming land, the soil being a rich alluvial deposit, well wooded with white spruce, Norway and red pine, and large cedars. White Lake, through which White River flows, lies in a level region, well wooded, the soil being an alluvial sandy loam.

The traverse line on this lake amounted to more than sixty-two miles, and the lake is 515 feet above the level of Lake Superior.

In the valley of the Black River, which flows into the Pic River near Lake Superior, and connects with White Lake, the land is generally level, consisting of an alluvial loam, generally a rich clay loam, well wooded, with large white spruce, poplar and cedar, with occasional exposures of gneiss, micaceous slate, etc.

Near Lake Superior the valley of the Pic River is encompassed with rocky hills, the level plateau in the valley consisting of sandy loam. North of the Black River the soil is clay loam, level and well wooded. About eight miles above the Black River, a tract of most excellent farming land begins; the soil is a rich alluvial clay loam, supporting a luxuriant growth of timber as well as, in many places, a fine growth of long prairie grass.

This fine tract of country with its fertile soil continues upwards of fifty miles farther into the interior, where a wide extent of country that has been burned off, with the same good land, stretches easterly and towards White Lake for a distance of about thirty miles. From this to the third portage, near the crossing of the line of exploration, the same land continues, with occasional rock exposures and escarpments of clay about sixty feet high, capped with deposits of sandy loam. The timber is chiefly white spruce, poplar

and cedar, similar to much of that growing in the fertile valleys of the Red, Assiniboine and Saskatchewan Rivers.

That a very wide extent of good level land, well fitted for agricultural purposes and settlement, exists in this region, has thus been determined by this survey. The accompanying Map exhibits its extensive area and position. The "height of land" or summit-level of this fertile plateau, dividing the waters flowing into Lake Superior and James's Bay, is about 700 feet above Lake Superior.

The range of rocky hills near the shores of Lake Superior, is doubtless rich in minerals in many places. On Lake Wawangonk, about eight miles from Michipicoten, a copper mine has been opened by Mr. Johnston of Detroit. This I visited in surveying the chain of lakes and rivers between Michipicoten and Lake Manitowik. Five houses are erected here and a wharf, and a deep excavation had been made in the rock, but no work was then going on. Some specimens of the ore obtained, are said to contain sixty per cent. of copper. I was informed by an officer of the H. B. Company that Mr. Johnston had sold one-eighth of his right to this mine for \$40,000.

The numerous lakes and rivers in the interior abound in excellent fish of many kinds, as well as the rivers at the coast of Lake Superior, some of which teem with vast numbers of salmon-trout of large size.

A good route for a line of road or railway, can be located in the level and fertile tract in the interior; and communication by water opened from Lake Superior inland by the large rivers and chains of lake stretching northerly to James' Bay. The Pic River, which, as stated, flows through a fertile tract, is well adapted for steam navigation, having a very gentle current, with a good depth of water—forty-six feet deep near its mouth, with a breadth of about four hundred feet. There is, however, a sand-bar at the mouth of the river, lessening its depth there, which would require to be removed.

The climate of this region is very favorable. From observations made at the Pic River by Mr. Ironside, H. B. Company, with a standard thermometer, the mean temperature was found to be—in July, $62^{\circ} 88'$; August, $63^{\circ} 54'$; September, $64^{\circ} 19'$; and October, $56^{\circ} 02'$, with very fine weather during these months. Thus although nearly five degrees of latitude north of Toronto, the temperature was nearly the same as at Toronto, during July and August, and a few degrees warmer during September and October, taking the average of 29 years.

Potatoes and garden vegetables, with oats, etc., are grown at the H. B. Company's posts, and succeed well, yielding good crops. Wild fruits are likewise abundant, particularly whortleberries, which grow most luxuriantly, of large size and fine flavor, and enormous quantities, their season lasting a long time.

I was enabled to survey with rapidity the many large lakes in the interior, by means of Massey's Patent Propeller Log, also the rivers, making the proper allowance for the rate of current. The latitudes were determined by Hadley's Sextant, reading to five seconds and an Artificial Horizon.

The elevations of the various points in the region explored with a view to establish its topography, were determined by a superior seven inch Holosteric Barometer, which had been carefully compared for a length of time with a Standard Barometer, at Toronto Observatory, and found very accurate.

The Indians in my employ proved of great service, having such an excellent knowledge of the country explored, and being so well experienced in packing and canoeing, with patient endurance of fatigue and hardship.

I have the honor to be,

Sir,

Your obedient servant,

J. A. FLEMING,

P. L. S.

PUBLIC ACCOUNTS

OF THE

PROVINCE OF ONTARIO,

FOR THE

YEAR ENDING 31 DECEMBER,

1870.

Laid before the Legislative Assembly, by Command.



To His Excellency the Honorable WILLIAM PEARCE HOWLAND, Companion of the Most Honorable Order of the Bath, Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR EXCELLENCY :

The undersigned has the honour to present to Your Excellency the *Public Accounts of the Province of Ontario*, for the year ending this day.

Respectfully submitted.

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
Toronto, December 31st, 1870.

CONTENTS.

	Page.		Page.
ADMINISTRATION OF JUSTICE :—		CONTINGENCIES— <i>Continued.</i>	
Court of Chancery—Salaries.....	22	Crown Lands Department	63
Do of Queen's Bench do	23	Education Office.....	67
Do of Common Pleas do	23	Normal and Model Schools	67
Deputy Clerks of the Crown and Pleas—		Depository	68
Salaries	27	Court of Chancery.....	69
Criminal Justice, Criminal Prosecutions	23	Do Queen's Bench	69
Do Administration of	25	Do Common Pleas	70
Do Special Services.....	27	Legislation	66
Miscellaneous Justice.....	28	Charges on Revenue	48
Seals and other Contingencies.....	30		
Repairs Osgoode Hall	30	CROWN LANDS EXPENDITURE :—	
Gratuities to Recorders.....	31	Salaries and Expenditure of Travelling	
ARBITRATION.....	56	Agents	20
ASYLUM MAINTENANCE :—		Surveys	55
Lunatic Asylum, Toronto.....	40	Refunds	50
Details of	73	Board of Examiners Land Surveyors ...	49
Malden Lunatic Asylum	40	Agents' Salaries, Commission, and Dis-	
Details of	75	bursements	49
Orillia Lunatic Asylum.....	40	Lands twice sold.....	49
Details of	77		
London.....	41	COLONIZATION ROADS :—	
Deaf and Dumb Institution.....	40	Expenditure.....	55
AGRICULTURE :—			
Electoral Division Societies, grants to...	42	CONSOLIDATED REVENUE FUND :—	
Agricultural Association.....	45	Statement of account on 31st Dec. 1870	3
Fruit Growers' Association	45	EXPENDITURE :—	
ALGOMA TAXES :—		Statement of	14
Statement of moneys received.....	10	EDUCATION :—	
BALANCES :—		Education Office—Salaries	46
Balance Sheet, 1870	1	Do Contingencies	67
Unexpended	112	Normal and Model School—Salaries.....	46
Overexpended	112	Do do Contingencies	67
Open accounts on 31st December, 1870..	4	Depository—Salaries	47
CIVIL GOVERNMENT :—		Contingencies	69
Government House	14	Libraries, Apparatus and Prizes—De-	
Lieutenant Governor's Office—Salaries..	14	tails of Expenditure	103
Executive Council Office, do ..	15	Grammar School Inspection... ..	47
Attorney General's Office do ..	14	<i>Journal of Education</i>	47
Treasury Department do ..	15	Common and Separate Schools	48
Secretary and Registrar's Office do ..	16	Do do Details... ..	93
Agriculture and Public Works Depart-		Poor Schools	48
ment—Salaries.....	17	Do Details	100
Crown Lands Department—Salaries.....	17	Grammar Schools	48
CONTINGENCIES :—		Do Details	92
Lieutenant Governor's Office.....	58	Superannuated Teachers	48
Executive Council Office	58	Do Details.....	100
Attorney General's Office.....	59	Museum and Library	48
Treasury Department.....	60	Do Details	106
Secretary and Registrar's Office.....	61		
Agriculture and Public Works Depart-		HOSPITALS AND CHARITIES :—	
ment.....	62	Aid to.....	
Auditor's Office	65	IMMIGRATION	41
Queen's Printer	65	INVESTMENTS	13
		Interest on	6
		JUDGES :—	
		Of Superior Courts—Salaries	31

	Page.		Page.
LICENSES :—		REFORMATORY PRISON	41
Statement of	7	Do Details.....	82
LITERARY AND SCIENTIFIC INSTITUTIONS :—		REVENUE :—	
Grants to	46	Casual Revenue	9
LEGISLATION :—		Fines and Forfeitures	9
Salaries	19	Lunatic Asylums	1
Repairs to buildings	20	Reformatory	1
Indemnity to Members.....	22	Education	12
Sessional Messengers, Writers and Pages	20	Dominion of Canada.....	1
Postages and Cost of House Post Office.	21	Crown and Clergy Lands.....	1
Stationery, including Printing Paper, &c.	21	Licenses.....	7
Printing, Binding and Circulating the		Consolidated Municipal Loan Fund.....	5
Statutes.....	21	Algoma Taxes.....	10
Expenses of Elections	21	Interest on Investments	6
Parliamentary Library	22	Law Stamps.....	11
Contingencies	66	STATIONERY :—	
LAW SOCIETY :—		Account, Statement of	57
Account— Statement of	109	Supplied the different Departments and	
MISCELLANEOUS :—		Offices.....	103
Arbitration	49	STATEMENT :—	
Inspection of Asylums and Prisons	18	Balance Sheet—Receipts and Payments	
Provincial Auditor.....	19	during the year	1
Queen's Printer	19	Consolidated Revenue Fund on 31st Dec-	
Cost of <i>Official Gazette</i>	19	cember, 1870.....	3
Inspection of Registry Offices.....	19	Balances of Open Accounts, 31st Decem-	
Gratuities	18	ber, 1870	
MUNICIPALITIES FUND	48	Consolidated Municipal Loan Fund—	
Do Details	84	Receipts.....	5
MUNICIPAL LOAN FUND :—		Interest on Investments	6
Receipts.....	5	Licenses.....	7
MECHANIC'S INSTITUTES :—		Casual Revenue	9
Grants to	44	Algoma Taxes	10
PUBLIC WORKS AND BUILDINGS :—		Law Stamps.....	11
Government House, Toronto	35	Education Office	12
Lieutenant Governor's Residence	40	Investments	13
Deaf and Dumb Institution	33	Expenditure.....	14
Toronto Lunatic Asylum.....	33	Contingencies	58
Asylum for the Blind	34	East Wing, repairs.....	71
Reformatory.....	35	Lunatic Asylum, Toronto.....	73
Lunatic Asylum, London	31	Malden Lunatic Asylum.....	75
Court House and Gaol, Sault Ste. Marie	36	Orillia do	77
Improvement of Navigation, Scugog		Deaf and Dumb Institution.....	79
River	37	Lunatic Asylum, London.....	81
Cut, Lakes Joseph and Rosseau.....	37	Reformatory Prison.....	82
Washago and Gravenhurst Road.....	37	Municipalities' Fund Account.....	83
Miscellaneous	40	Do Distribution.....	84
Lock on Rosseau River.....	36	Education Expenditure Details.....	92
Lock at Young's Point.....	37	Stationery supplied various Depart-	
Navigation Balsam and Cameron Lakes.	37	ments	108
Survey and Drainage of Crown Lands..	38	Law Society.....	109
		Balances of Appropriations	113
		Unforeseen and Unprovided.....	110
		Overexpended	111

35 Victoria.

Sessional Papers (No. 2).

A. 1871

PUBLIC ACCOUNTS

OF THE

PROVINCE OF ONTARIO.

1870.



No. 1.

BALANCE SHEET, shewing the entire Receipts and Payments of the Treasurer of Ontario during the year 1870, with the Cash Balances on the 1st January and 31st December.

RECEIPTS.		\$	cts.	\$	cts.	PAYMENTS.		\$	cts.	\$	cts.
Jan. 1...	Cash Balance as per Statement No. 1 of 1869						CONSOLIDATED REVENUE FUND. (As per Statement No. 12.)				
	CONSOLIDATED REVENUE FUND.						For Civil Government	104,909	35		
	From Grammar School Lands Sales						For Crown Lands and Woods and Forests	80,481	17		
	From Crown Lands Sales						For Colonization Roads	50,000	00		
	From Woods and Forests						For Legislation	37,487	87		
	From Municipal Loan Fund, per Statement No. 4						For Administration of Justice	180,004	02		
	From Interest on Investments, per Statement No. 5						For Lunatic Asylums, maintenance	135,452	44		
	From Licenses, per Statement No. 6						For Reformatory, Penitentiary, and Asylums	22,473	36		
	From Casual Revenue, per Statement No. 7						For Immigration	32,087	65		
	From Alameda Taxes, per Statement No. 8						For Agriculture and Mechanics Institutes	66,722	20		
	From Law Stamps, per Statement No. 9						For Hospitals and Charities	42,510	00		
	From Education Department, per Statement No. 10						For Literary and Scientific Institutions	1,350	00		
	From Reformatory, Penitentiary, and Asylums, per Statement No. 20						For Education	315,887	92		
	From Lunatic Asylum, Toronto, per Statement No. 15						For Charges on Revenue	5,442	81		
	From Lunatic Asylum, Malden, per Statement No. 16						OPEN ACCOUNTS.			1,074,808	79
	From Lunatic Asylum, Orillia, per Statement No. 17						For Government House, Toronto, capital account	37,867	29		
	From Lunatic Asylum, Rockwood						For Lunatic Asylum, Toronto, capital account	26,232	76		
							For Lunatic Asylum, London, capital account	157,561	63		
							For Deaf and Dumb Institute, Belleville, capital account	36,497	53		
							For Asylum for the Blind, Brantford, capital account	15,533	94		
							For Reformatory, Penitentiary, and Asylums, capital account	7,590	95		
	Carried forward						Carried forward	281,284	10		
										1,074,808	79

No. 1.—BALANCE SHEET, showing the entire Receipts and Payments of the Treasurer of Ontario, during the year 1870, with the Cash Balances on the 1st January and 31st December.—*Concluded.*

RECEIPTS.	\$ cts.	\$ cts.	\$ cts.	PAYMENTS.	\$ cts.	\$ cts.	\$ cts.
<i>Brought forward</i>	1,065,623 12	.....	131,954 00	<i>Brought forward</i>	281,284 10	1,074,808 79	
CONSOLIDATED REV. FUND— <i>Con.</i>				OPEN ACCOUNTS— <i>Continued.</i>			
From Deaf and Dumb Institution, per Statement No. 18.....	454 00	1,066,077 12		For Court House and Gaol, Sault Ste. Marie, capital account	1,624 42		
OPEN ACCOUNTS.				For Lock on Rosseau River, capi- tal account.....	11,792 27		
From Dominion of Canada	1,251,080 51			For Lock at Young's Point, capi- tal account.....	18,804 95		
From Municipalities' Fund	88,634 25			For Lock on Balsam and Cameron Lakes, capital account	3,837 32		
From Common School Lands	94,903 82	1,434,618 58	2,500,695 70	For Navigation Seaugog River, capital account.....	19,040 61		
				For Cut between Lakes Joseph and Rosseau, capital account	6,794 30		
				For Washago and Gravenhurst Road, capital account.....	17,203 43		
				For Surveys and Drainage of Swamp Lands, capital account.....	46,371 79		
				For Repairs to Brock's Monument and Grounds adjacent	981 10		
				For Arbitration	16,120 27		
				For Stationery Office, supplies for general Service.....	1,686 56		
				For Municipalities' Fund, as per Statement No. 21	80,313 30	505,854 42	1,580,663 21
				For Investments, Special Deposits, as per Statement No. 11			852,980 25
				Dec. 31. Bank of Montreal, balance of			199,006 33
				Cash Account			2,632,649 79

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

No. 2.

STATEMENT of the Consolidated Revenue Fund, including the items transferred to it, to the 31st December, 1870.

1870	—	\$ cts.	\$ cts.	1870	—	\$ cts.	\$ cts.
Dec. 31.	To Expenditure as per Statement No. 1.....	1,074,808 79		Jan. 1.	By balance as per Statement No. 2, 1869..... " receipts 1, 1870.....		2,416,424 19 1,066,077 12
	<i>To Dominion of Canada:</i> For half-year's interest on Ontario's excess of debt, Jan. 1.....	145,833 33			<i>By Dominion of Canada:</i> By half-year's interest on Special Funds to January 1.....	74,847 13	
	For half-year's interest on Ontario's excess of debt, July 1.....	145,833 33			By half-year's interest on Special Funds to July 1.....	74,847 14	
	<i>To Law Society of U. C.:</i> For allowance as an equivalent for fees.....		14,500 00		<i>By Municipalities Fund:</i> For 20 per cent. on amount collected during the year for cost of management.....	17,268 85 723 72	149,604 27
	To balance carried down		3,505,217 51		By Refunds Clergy Lands, 1869-1870		17,992 57
					<i>By Stationery Account:</i> For amount transferred in error, 1869		1,975 96
					<i>By Dominion of Canada:</i> Half-year's subsidy and special payments, January 1.....	598,436 40	
					Half-year's subsidy and special payments, July 1.....	598,436 40	1,196,872 80 34,255 00 2,901 05
					By receipts from Marriage Licenses..... " Law Stamps and Fees.....		4,886,192 96
		4,886,192 96		1871 Jan. 1.	By balance brought down.....	3,505,217 51	

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
 TORONTO, 31st December, 1870.

No. 3.

STATEMENT of the Balances of Open Accounts, 31st December, 1870.

	\$	cts.	\$	cts.
Bank of Montreal.....	199,066	33		
Toronto General Hospital.....	4,000	00		
Special Deposits, Bank of Montreal.....	1,450,000	00		
Do Royal Canadian Bank.....	90,174	31		
Investment Account.....	1,555,471	68		
Stationery Supply Account.....	3,662	52		
Arbitration.....	16,120	27		
Repairs to Brock's Monument.....	981	10		
Jurassic Asylum, Toronto, Capital Account.....	153,606	06		
Government House, do.....	105,272	77		
Do Buildings, do.....	72,754	06		
Deaf and Dumb Institution, Belleville, Capital Account.....	77,940	78		
Surveys and Drainage of Swamp Lands, do.....	49,975	74		
Muskoka Gaol and Registry Office, do.....	1,157	74		
Court House and Gaol, Algoma, do.....	9,840	25		
Lock, Balsam and Cameron Lakes, do.....	4,332	95		
London Lunatic Asylum, do.....	232,722	70		
Lock on Rosseau River, do.....	18,770	53		
Do at Young's Point, do.....	29,593	40		
Improvement of Navigation, Scugog River, do.....	19,040	61		
Asylum for the Blind, Brantford, do.....	15,533	94		
Washago and Gravenhurst Road, do.....	17,263	43		
Cut between Lakes Joseph and Rosseau, do.....	6,794	30		
Reformatory, Penetanguishene, do.....	7,590	95		
	4,141,547	02		
Dominion of Canada.....			141,108	59
Law Society.....			49,918	07
Consolidated Fund.....			3,505,217	51
Municipalities Fund.....			71,975	63
Canada Land and Emigration Company.....			8,023	41
Common School Lands.....			365,303	81
			4,141,547	02

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

No. 4.

STATEMENT shewing the several amounts received by the Treasurer of the Province of Ontario, on account of the Consolidated Municipal Loan Fund, during the year ended 31st December, 1870.

FROM WHOM RECEIVED.	S E R V I C E .	\$ cts.	\$ cts.
Hon. A. A. Burnham	Treasurer United Counties Northumberland & Durham.	34,600 00	
H. P. Brown	do County of Oxford.....	2,400 00	
A. M. Ross ..	do do Huron.....	20,240 00	
Thos. H. Wright.....	do do Essex.....	2,415 04	
F. LePan	do do Grey.....	1,280 00	
G. T. Claris	do do Elgin.....	6,400 00	
G. P. M. Ball	do do Lincoln.....	3,840 00	
Alex. Vidal	do do Lambton.....	1,280 00	
F. McAnany.....	do do Hastings.....	12,608 04	
A. W. Hann.....	do Township of Wainfleet.....	3,200 00	
R. Reid	do do Stanley.....	800 00	
J. Johnston	do do Bertie.....	3,200 00	
C. R. Biggar.....	do do Brantford.....	6,850 40	
Chas. Fletcher.....	do Town of Goderich.....	2,319 00	
Duncan McKay	do do Brantford.....	18,459 40	
J. Edwards	do do Peterboro'.....	4,895 25	
T. N. Bosworth	do do Paris.....	3,200 00	
J. Smart	do do Port Hope.....	6,125 33	
W. D. Ardagh.....	Reeve do Barrie.....	985 93	
G. W. Lawrence.....	Treasurer do Stratford.....	2,947 00	
W. H. Thompson	Chamberlain City of Ottawa.....	15,263 15	
County of Perth	Transferred from Municipalities Fund	2,159 70	
W. C. Lanark and Renfrew	do do do	3,001 50	
			158,469 70

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

No. 5.

STATEMENT of Interest received on account of Investments, during the year ended 31st December, 1870.

FROM WHOM RECEIVED.	NATURE OF INVESTMENT.	\$ cts.	\$ cts.
Hon. Receiver-General	Twelve Months' Dividend on \$350,000, 6 per cent. Dominion Stock to 30th September	21,000 00	
	Do. Interest on \$500,000, 6 per cent. Dominion Bonds to 30th September	30,000 00	
	Do. Do. on £150,000, 5 per cent. Dominion Debentures to 1st July	36,500 00	
Bank of Montreal.	Interest on \$1,450,000, 4 per cent. Special Deposits to 31st December	52,204 25	
Royal Canadian Bank	Interest on \$30,000 51, 4 per cent. Special Deposit to 31st December	4,599 30	
Municipalities' Fund	On account of Interest on City of Hamilton Debt transferred.....	1,820 10	
			140,123 65

E. B. WOOD,
*Treasurer.*TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

No. 6.

REVENUE received by the Treasurer of Ontario on account of Licenses, during the year 1870.

DIVISION.	ISSUER.	Tavern and Shop Licenses.	Vessel Licenses.	TOTAL.
		\$ cts.	\$ cts.	\$ cts.
Algoma	John M. Hamilton.....	86 48		86 48
Brant	John Cameron.....	1,777 54		1,777 54
Bruce	William Gunn.....	962 56		962 56
Carleton.....	Wm. F. Powell.....	2,976 04		2,976 04
Durham East	Geo. C. Ward.....	671 16		
Do	Francis Murphy.....	608 18		
		1,279 34	18 80	1,298 14
Durham West	Robert Armour.....	387 28		387 28
Dundas	John P. Cryslor.....	340 28		340 28
Essex	S. S. Macdonell.....	1,453 80		1,453 80
Elgin	James Stanton.....	690 00		690 00
Frontenac.....	George A. Cumming.....	2,632 00		2,632 00
Glengarry.....	A. M. Mackenzie.....	490 68		490 68
Grenville.....	W. J. Scott.....	810 25		810 25
Grey	W. Armstrong.....	1,031 28		1,031 28
Haldimand	John R. Martin.....	870 44		870 44
Halton	W. L. P. Eager.....	783 02		783 02
Hamilton City.....	John H. Greer.....	2,633 88	169 20	2,803 08
Hastings	A. Diamond.....	1,232 36		1,232 36
Huron	D. Lizars.....	1,920 70		1,920 70
Kent	Wm. Douglas.....	1,522 34		1,522 34
Lambton.....	Julius P. Bucke.....	1,001 10		1,001 10
Lanark North.....	John Menzies.....	231 24		231 24
Lanark South.....	Charles Rice.....	552 72		552 72
Leeds	Ormond Jones.....	1,017 08		1,017 08
Lennox and Addington.....	J. B. McGuin.....	486 83		486 83
Lincoln	Rolland Macdonald.....	1,535 38		1,535 38
London City.....	W. C. L. Gill.....	1,850 02		1,850 02
Middlesex.....	Chas. Hutchinson.....	1,767 20		1,767 20
Muskoka.....	C. W. Lount.....	116 25		116 25
Niagara Town and Township.....	George B. Boyle.....	316 00		316 00
Norfolk	C. C. Rapelje.....	750 12		750 12
Northumberland East	G. M. Grover.....	266 96		266 96
Northumberland West.....	Wm. Corrigan.....	140 84		
Do	Wm. Eyre.....	579 04		
		719 88		719 88
Nipissing	Thos. H. Johnson.....	12 38		
Do	John Doran.....	158 61		
		170 99		170 99
Ontario	H. J. Macdonald.....	789 60		789 60
Oxford	James Ingersoll.....	1,621 50		1,621 50
Peel.....	Geo. Green.....	977 79		977 79
Perth	M. Hayes.....	1,560 58		1,560 58
Peterborough.....	Thos. Fortye.....	1,000 16		1,000 16
Prescott.....	E. T. Dartnell.....	347 92		347 92
Prince Edward.....	John P. Roblin.....	152 28		152 28
Renfrew.....	Andrew Irving.....	1,116 06	18 80	1,134 86
Russell	James Keays.....	67 12		67 12
Simcoe	James R. Cotter.....	2,002 54	75 20	2,077 74
Stormont.....	R. Macdonald.....	512 50		512 50
Toronto and part of York.....	Ogle R. Gowan.....	6,455 92	56 40	6,512 32
Victoria.....	Wm. Grace.....	883 74	56 40	940 14
Waterloo	James Colquhoun.....	1,844 03		1,844 03
Welland	Isaac P. Willson.....	1,532 20		1,532 20
Wellington.....	Thos. Saunders.....	2,526 72		2,526 72
Carried forward.....		58,052 70	394 80	58,447 50

REVENUE received by the Treasurer of Ontario on account of Licenses, during the year 1870.—*Concluded.*

DIVISION	ISSUER.	Tavern and Shop Licenses.	Vessel Licenses.	TOTAL.
<i>Brought forward</i>.....	.....	\$ cts. 58,052 70	\$ cts. 394 80	\$ cts. 58,447 50
Wentworth	S. H. Ghent.....	1,218 24	.....	1,218 24
York North	James J. Pearson	768 92	37 60	806 52
		60,039 86	432 40	60,472 26
Isaac Mintz	Pawnbroker's license.....		60 00	
Thos. May	do		60 00	
John Kavanagh	do		60 00	
				180 00
				60,652 26

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

No. 7.

STATEMENT of Casual Revenue received by the Treasurer of the Province of Ontario, during the year ended 31st December, 1870.

FROM WHOM RECEIVED.	SERVICE.	\$ cts.	\$ cts.
D. E. McIntyre	Sheriff of the Counties of Stormont, Dundas and Glengarry, fines and forfeitures	9 70	
F. G. Dickinson	Sheriff of the Counties of Leeds and Grenville, fines and forfeitures	38 00	
Andrew Ross	Sheriff of the County of Oxford, fines and forfeitures	949 55	
R. Martin	do do Haldimand, do	40 37	
C. Munro	do do Elgin, do	90 25	
F. W. Jarvis	do do York, do	80 75	
J. Mercer	do do Kent, do	123 50	
E. C. Thomas	do do Wentworth, do	83 50	
B. W. Smith	do do Simcoe, do	103 64	
J. Macdonald	do do Huron, do	478 38	
J. Flintoft	do do Lambton, do	4 75	
J. McEwen	do do Essex, do	47 50	
W. Fergusson	do do Frontenac, do	20 00	
E. Deedes	do do Norfolk, do	9 50	
N. McDougall	do do Victoria, do	19 00	
F. R. Ball	Clerk of Peace do Oxford, do	4 00	
L. D. Raymond	do do Welland, do	5 00	
George Green	do do Peel, do	2 50	
Jas. Bethune	do Counties of Stormont, Dundas and Glengarry, fines and forfeitures	4 00	
J. Edwards	Justice of the Peace, County of Peterboro', fines and forfeitures	2 50	
W. Stitt	Justice of the Peace, Counties of Leeds and Grenville, fines and forfeitures	1 50	
Thos. Houston	Justice of the Peace, County of Lambton, fines and forfeitures	50	
J. M. Savage	Registrar, Algoma, Fees received by him		2,120 39
John McNab	County Attorney, Unclaimed Funds in hands of Clerk, 5th Division Court, York	40 26	64 90
John Creaser	County Attorney, Unclaimed Funds in hands of Clerk, 5th Division Court, Grey	11 57	
T. C. Patteson	Asst. Secretary.—Fees received in Secretary's office, viz. : 4 Queen's Bench Certificates, at 4.00	16 00	
	2 County Court do at 4.00	8 00	
	23 Commissions under Great Seal, at 13.00	299 00	
	44 do do Privy do at 8.00	352 00	
	110 Judicial and Notarial Certificates, at 1.00	110 00	
	15 Declarations of Companies advertised, at 5.00	75 00	
	10 Charters of Incorporation, at 25.00	250 00	
	1 do do at 30.00	30 00	
	1 Co-operative Certificate, at 20.00	20 00	
			1,160 00
T. C. Patteson	Deputy Registrar.—Fees received in Registrar's office, viz. : 43 Exemplifications of Patents, at 8.25	354 75	
	53 Certified Copies of Patents, at 2.50	132 50	
	7 Certificates of do do at 50	3 50	
	24 Searches, at 25 cents	6 00	
			496 75
Hunter, Rose & Co.	On account of <i>Gazette</i>	11,965 45	
Alex. Gordon	Queen's Printer, on account of <i>Gazette</i>	836 14	
John Notman	do do	1,965 10	
			14,766 69
Alex. Gordon	Queen's Printer, on account of Statutes sold	732 78	
John Notman	do do	1,402 17	
			2,134 95
Hon. S. Richards	Refund of Balance of Warrant No. 726, issued Oct. 4, 1868, being refund to P. Kavanagh unexpended		15 40
			20,810 91

No. 8.

STATEMENT shewing the several amounts received by the Treasurer of Ontario, on account of Taxes on Patented Lands in the District of Algoma, during the year ended 31st December, 1870.

FROM WHOM RECEIVED.	SERVICE	\$ cts.	\$ cts.
John M. Hamilton.....	Collector of Taxes, Algoma District: on account of Taxes	2,356 08	
Hon. W. P. Howland, and others	do	52 80	
J. C. T. Cochrane	do	40 79	
J. J. Vickers	do	29 08	
G. D. Fergusson	do	33 42	
George Ley	do	35 39	
			2,547 56

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
Toronto, December 31st, 1870.

No. 9.

STATEMENT of Revenue received on account of Law Stamps during year ended
31st December, 1870.

COUNTY.	DISTRIBUTOR.	Paid for Law Stamps.	Paid on account old credits.	Total.
		\$ cts.	\$ cts.	\$ cts.
Brant	Geo. R. Van Norman	1,587 45	219 03	1,806 48
Bruce	D. W. Ross	1,333 59		1,333 59
Carleton	Robert Lees	2,211 13	599 54	2,810 67
Elgin	James Stanton	665 00	43 31	708 31
Essex	S. S. Macdonnell	912 00	221 35	1,133 35
Frontenac	A. S. Kirkpatrick	1,234 53	264 63	1,499 16
Grey	Jno. Creasor, Jr.	1,730 68	10 00	1,740 68
Haldimand	Jno. R. Martin	475 00	47 04	522 04
Halton	Jno. Dewar, Jr.	657 40		657 40
Hastings	Chas. L. Coleman	1,821 15	649 37	2,470 52
Huron	Ira Lewis	1,940 75	357 47	2,298 22
Kent	Wm. Douglas	687 92	8 36	696 28
Lambton	J. P. Bucke	1,093 36	14 75	1,108 11
Lanark	Chas. Rice	989 00	50 78	1,040 68
Lennox and Addington	W. A. Reeve	1,050 00		1,050 00
Leeds and Grenville	Saml. Reynolds, Jr.	1,469 75	92 72	1,562 47
Lincoln	Rolland Macdonald	1,520 00	10 00	1,530 00
Middlesex	Chas. Hutchinson	2,645 75	435 04	3,080 79
Norfolk	L. H. Hunt	916 75	1 41	918 16
Northumberland and Durham	Jno. D. Armour	1,648 25		1,648 25
Ontario	S. H. Cochrane	1,805 00		1,805 00
Oxford	Francis R. Ball	1,320 50		1,320 50
Peel	Geo. Green	1,117 63	2 80	1,120 43
Perth	M. Hayes	1,605 50	123 31	1,728 81
Peterborough	C. A. Weller	1,405 95	2 51	1,408 46
Prescott and Russell	Edward T. Dartnell	377 14	21 76	398 90
Prince Edward	Philip Low	633 50	42 73	676 23
Renfrew	H. H. Loucks	350 10		350 10
Simcoe	James R. Cotter	2,947 38	17 13	2,964 51
Stormont, Dundas and Glengarry	James Bethune	1,722 96	13 76	1,736 72
Victoria	A. LaCourse	427 50		427 50
Waterloo	W. H. Bowlby	1,453 50	13 50	1,467 00
Welland	L. D. Raymond	575 70	3 45	579 15
Wellington	H. W. Peterson	2,446 85	30 00	2,476 85
Wentworth	S. B. Freeman	2,770 00	40 00	2,810 00
York	W. W. Baldwin	23,104 00	4,203 62	27,307 62
Do Surrogate Court	Hon. W. Cayley	285 00		285 00
		70,938 57	7,539 37	78,477 94

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

No. 10.

STATEMENT of Receipts from Education Department for the year ended 31st December, 1870.

SERVICE.	PARTICULARS.	\$ cts.	\$ cts.	\$ cts.
Normal and Model Schools	Fees, Pupils	3,867 00		
	Interest on \$1,100 Dominion Stock to 30th September, 1870	66 00		
	Panels of glass broken	1 40		
	Interest on (Prize) Debentures	18 00	3,952 40	
12 Depository	Sales of Maps, Apparatus, Prizes and Libraries during year		22,275 54	
Superannuated Teachers	Subscriptions during year	209 00		
	Interest on \$2,000 Dominion Stock to 30th September, 1870	120 00	329 00	
Journal of Education	Subscriptions and Advertisements		23 76	
Museum	Sales of Photographs		14 00	
Contingencies, Education Office	Postage Stamps		54 47	
	Total			26,640 17

E. B. WOOD,
*Treasurer.*TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

No. 11.

STATEMENT of Investments made during the year ended 31st December, 1870.

TO WHOM PAID.	NATURE OF INVESTMENT.	Amount.	Total Amount.
		\$ cts. \$50,000 00 2,980 25	\$ cts. 852,980 25
Bank of Montreal	Special deposit, bearing interest at 4 per cent.		
Royal Canadian Bank	Do do do		
	Amount of investments made in 1868	850,000 00	
	Do do 1869	705,471 68	
	Amount of special deposits made in 1869	687,194 06	
	Do do 1870	852,980 25	
		<u>3,095,645 99</u>	

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

No. 12.

STATEMENT of the Expenditure made by the Provincial Treasurer on account of the Province of Ontario, during the year ending 31st December, 1870.

TO WHOM PAID.	S E R V I C E .	\$	cts.	\$	cts.
	GOVERNMENT HOUSE.				
Metropolitan Water Co.....	Water supply.....	205	83		
Consumers' Gas Co.....	Gas do.....	649	89		
Wm. Myles.....	Fuel.....	330	25		
T. C. Chisholm.....	do.....	253	19		
Geo. Chaffey & Bro.....	do.....	269	69		
E. G. Curtis.....	To pay rent of Lieutenant-Governor's residence from January 1st to June 14th, 1870.	546	03		
James Young.....	Services as gardener.....	299	00		
P. Latham.....	do caretaker.....	240	00		
G. Stafford.....	do do.....	91	00		
P. Yeats.....	do do.....	61	00		
N. Roach.....	do do.....	83	75		
G. Stafford.....	do do.....	13	75		
W. J. Smith.....	do do.....	26	25		
M. McKenna.....	Cleaning.....	122	60		
L. Glynn.....	Clearing snow.....	38	75		
Sundry persons.....	Sundries.....	3	35	3,234	33
	LIEUTENANT-GOVERNOR'S OFFICE.				
	Salaries.				
E. G. Curtis.....	Twelve months' salary as Private Secretary to 31st December, 1870.....	800	00		
M. Bailey ..	do Messenger.....	400	00		
	Contingencies.	1,200	00		
	For the year ended 31st December, 1870, as per Statement No. 13.....	365	81	1,565	81
	ATTORNEY-GENERAL'S OFFICE.				
	Salaries.				
Hon. J. S. Macdonald.....	Twelve months salary as Attorney-General to 31st December, 1870.....	4,000	00		
James Ross.....	Ten months salary as Chief Clerk, from 1st January to 31st October, 1870, at \$1,200 per annum.....	1,000	00		
J. G. Scott.....	Two months salary as Chief Clerk, from 1st November to 31st December, 1870, at \$1,200 per annum.....	200	00		

H. Kinloch	Twelve months salary as Second Clerk, to 31st December, 1870	700 00	
A. McDonell	do do Messenger	250 00	
	<i>Contingencies.</i>	6,150 00	
	For the year ended 31st December, 1870, as per Statement No. 13	1,277 31	7,427 31
	EXECUTIVE COUNCIL OFFICE.		
	<i>Salaries.</i>		
James Ross	Ten months salary as Clerk, from 1st January to 31st October, 1870, at \$400 per annum	333 32	
J. G. Scott	Two months salary as Clerk, from 1st November to 31st December, 1870, at \$400 per annum	66 68	
A. McDonell	Twelve months salary as Messenger, to 31st December, 1870	250 00	
M. J. Smith	do do Caretaker	365 00	
	<i>Contingencies.</i>	1,015 00	
	For the year ended 31st December, 1870, as per Statement No. 13	676 41	1,691 41
	TREASURY DEPARTMENT.		
	<i>Salaries.</i>		
Hon. E. B. Wood	Twelve months salary as Treasurer to 31st December, 1870	3,200 00	
Geo. Mathews	do do Chief Clerk	1,200 10	
W. R. Harris	do do Accountant	1,200 00	
James Kerr	Nine months salary as Book-keeper, Audit Branch, from 1st January to 30th September, 1870, at \$500 per annum	675 00	
Chas. H. Sproule	Three months salary as Book-keeper, Audit Branch, from 1st October to 31st December, 1870, at \$700 per annum	175 00	
Do	Nine months salary as Law Stamp and Junior Audit Clerk, from 1st January to 30th September, 1870, at \$700 per annum	525 00	
James Ross	Salary as Law Stamp and License Clerk, from 24th October to 31st December, 1870, at \$1,200 per annum	223 33	
R. M. Willson	Twelve months salary as Clerk of Correspondence, to 31st December, 1870	500 00	
Jno. Little	Ten months salary as Messenger, from 1st January to 31st October, 1870, at \$365 per annum	364 00	
P. Simser	Two months salary as Messenger, from 1st November to 31st December, 1870, at \$365 per annum	61 00	
	<i>Contingencies.</i>	8,063 43	
	For the year ended 31st December, 1870, as per Statement No. 13	1,831 53	
	<i>Repairs.</i>	711 74	
	For the year ended 31st December, 1870, as per Statement No. 14		10,606 70
	<i>Carried forward</i>		24,525 56

Civil Government—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.
	<i>Brought forward</i>			24,525	56
	SECRETARY AND REGISTRAR'S OFFICE.				
	<i>Salaries.</i>				
Hon. M. C. Cameron	Twelve months' salary as Secretary and Registrar to 31st December, 1870	3,200	00		
T. C. Patteson.....	do Assistant Secretary and Deputy Registrar, to 31st December, 1870.....	2,000	00		
J. R. Eckart	Twelve months' salary as First Clerk, to 31st December, 1870	900	00		
Jno. F. C. Ussher.....	do Clerk	900	00		
H. S. Creve	One month's salary	60	83		
Henry Alley.....	Twelve months' salary	500	00		
J. A. Immes.....	do	400	00		
Geo. Hobbs	Eleven months' salary as Clerk from 1st February to 31st December, 1870, at \$500 per annum	458	32		
A. Burtchall	Twelve months' salary as Messenger to 31st December, 1870	365	00		
		8,784	15		
	REGISTRAR GENERAL'S DEPARTMENT.				
H. S. Creve.....	Eleven months' salary as Clerk in Registrar General's Office.....	669	17		
Do	To pay Cab hire and express charges	90	59		
Hunter, Rose & Co.	Printing, Registrar General's Office	971	66		
Jos. Lesslie	Postage,	122	05		
Jas. R. Armstrong	Stove,	10	08		
Wm. Firstbrook	Boxes,	13	61		
Jno. Notman	Stationery,	26	65		
Hon. E. B. Wood	To pay County Registrar's of Births, Marriages and Deaths.....	3,808	63		
		5,712	47		
	<i>Contingencies.</i>				
	For the year ending 31st December, 1870, as per Statement No. 13.....	1,270	72		
	<i>Repairs.</i>				
	For the year ending 31st December, 1870, as per Statement No. 14.....	711	74		
				16,479	08

DEPARTMENT OF AGRICULTURE AND PUBLIC WORKS.			
<i>Salaries.</i>			
Hon. Jno. Carling	Twelve months' salary as Commissioner of Agriculture and Public Works to 31st December, 1870	3,200 00	
Kivas Tully	do do	1,800 00	
T. N. Molesworth	Twelve months' salary as Architect and Engineer to 31st December, 1870	1,600 00	
Wm. Edwards	do do	1,200 00	
Geo. Buckland	Secretary of Public Works do	800 00	
F. T. Jones	Secretary of Agriculture and Arts to 31st December, 1870	1,000 00	
E. Jenkinson	Accountant do	365 00	
	Messenger do		
	<i>Contingencies.</i>	9,965 00	
	For the year ending 31st December, 1870, as per Statement No. 13	1,965 23	
	<i>Repairs.</i>		
	For the year ending 31st December, 1870, as per Statement No. 14	711 75	12,641 98
CROWN LANDS DEPARTMENT.			
<i>Salaries.</i>			
Hon. S. Richards	Twelve months' salary as Commissioner of Crown Lands to 31st December, 1870	3,200 00	
Thos. H. Johnson	do do	2,600 00	
Jno. M. Currie	Twelve months' salary as Clerk to 31st December, 1870	1,400 00	
	<i>Free Grants and Sales Branch.</i>		
J. C. Tarbutt	Twelve months' salary as Chief Clerk to 31st December, 1870	1,800 00	
A. Kirkwood	do do	1,500 00	
A. J. Taylor	do do	1,200 00	
J. M. Grant	do do	1,100 00	
H. G. Langlois	Five months' salary as Clerk from 1st January to 31st May, 1870, at \$500 per annum.	208 32	
	<i>Surveys, Patent and Roads Branch.</i>		
Thos. Devine	Twelve months' salary as Chief Clerk to 31st December, 1870	1,800 00	
E. Fox	do do	1,280 00	
G. B. Kirkpatrick	do do	800 00	
H. J. Jones	do do	1,400 00	
J. Innes	do do	900 00	
R. H. Temple	do do	730 00	
	<i>Carried forward</i>	19,918 32	53,646 62

Civil Government—Concluded.—Legislation.

TO WHOM PAID.	S E R V I C E.	\$	cts.	\$	cts.	%	cts.
	<i>Brought forward</i>			19,918	32		53,646 62
	CROWN LANDS DEPARTMENT.— <i>Continued.</i>						
	<i>Woods and Forests Branch.</i>						
J. C. Miller.....	Twelve months salary as Chief Clerk, to 31st December, 1870.....		1,600	00			
G. B. Cowper.....	do do Clerk.....		1,240	00			
W. H. Cooper.....	Five months salary as Clerk, from 1st January to 31st May, 1870, at \$500 per annum.....		208	32			
H. G. Langlois.....	Seven months salary as Clerk, from 1st June to 31st Decr, 1870, at \$300 per annum.....		291	68			
E. Kirby.....	Twelve months salary as Clerk, to 31st December, 1870.....		365	00			
	<i>Accounts Branch.</i>						
Wm. Ford.....	Twelve months salary as Accountant, to 31st December, 1870.....		1,800	00			
D. G. B. Ross.....	do do Book-keeper.....		900	00			
R. H. Browne.....	do do Clerk.....		800	00			
J. Scott.....	do do do.....		800	00			
J. Murphy.....	Twelve months salary as Registrar, to 31st December, 1870.....		1,400	00			
J. Bradshaw.....	Twelve months salary as Caretaker, to 31st December, 1870.....		500	00			
D. McDonald.....	do do Messenger.....		450	00			
	<i>Contingencies and Repairs.</i>						
	For the year ended 31st December, 1870, as per Statement No. 13.....		30,273	32			
			6,019	15			36,292 47
	MISCELLANEOUS.						
	<i>Gratuities.</i>						
Augusta Gordon.....	Amount allowed her as widow of deceased public officer.....		166	67			
James Kerr.....	Amount allowed him on retiring from Audit Branch, Treasury Department.....		150	00			
R. H. Temple.....	do do Crown Lands Department.....		365	00			
R. J. Turner.....	do do Accountant's Office, Court of Chancery.....		1,000	00			
Thos. Gray.....	do do Registrar's Office, Court of Chancery.....		800	00			
	<i>Inspector of Prisons.</i>						
J. W. Langmuir.....	Twelve months salary to 31st December, 1870.....		2,060	00			

Do	Travelling expenses, stationery, postages, &c	736 39		
J. Fairfield	Services as Clerk	94 50		
D. Forbes	do	239 25		
<i>Provincial Auditor.</i>				
Hon. Wm. Cayley	Twelve months salary to 31st December, 1870	2,000 00		
W. R. Nursey	do as Clerk in Auditor's Office	734 00		
Robertson & Cook	Printing	3 00		
	Contingencies for the year ended 31st December, 1870, as per Statement No. 13	66 18		
<i>Inspector of Registry Offices.</i>				
Hon. Sidney Smith	Twelve months salary to 31st December, 1870	2,000 00		
<i>Queen's Printer.</i>				
Alex. Gordon	Three months salary to 31st March, 1870, at \$800 per annum	200 00		
	Contingencies for the year ended 31st December, 1870, as per Statement No. 13	69 42		
<i>Official Gazette.</i>				
Hunter, Rose & Co.	Printing	4,345 85	14,970 26	104,909 35
LEGISLATION.				
<i>Salaries.</i>				
Chas. T. Gillmor	Twelve months salary as Clerk of the House, to 31st December, 1870	1,400 00		
Jno. Notman	do Assistant Clerk	1,200 00		
Jas. J. Vance	do Clerk of Private Bills	1,200 00		
A. Leith	do do	1,000 00		
H. J. Hartney	do Law Clerk	600 00		
A. H. Sydere	Nine months salary as Office Clerk, to 30th September, 1870, at \$800 per annum	600 00		
S. J. Vankoughnet	Twelve months salary as Clerk of Routine and Record, to 31st December, 1870	400 00		
Angus Morrison	do Clerk of the Crown in Chancery	375 00		
A. Gordon	Nine months salary as Junior Clerk, to 30th September, 1870, at \$500 per annum	50 00		
Thos. Phillips	Three months salary as Librarian, to 31st March, 1870, at \$200 per annum	500 00		
W. Johnson	Twelve months salary as Housekeeper, to 31st December, 1870	365 00		
D. Byrne	do Messenger	365 00		
Jno. Bowman	do do	365 00		
C. A. Macdonald	do do	365 00		
James Wells	do Fireman	365 00		
R. J. Glackmeyer	do Night Watchman	365 00		
	Six months salary as Sergeant-at-Arms	200 00	9,350 00	
<i>Contingencies.</i>				
	For the year ended 31st December, 1870, as per Statement No. 13		1,919 07	
	<i>Carried forward.</i>		11,269 07	104,909 35

Legislation—Continued.

TO WHOM PAID.	SERVICE.	\$ cts.			\$ cts.	\$ cts.	\$ cts.
	<i>Brought forward</i>				11,269 07		104,909 35
	<i>Repairs to Buildings.</i>						
Geo. Chaffey & Bro.	Fuel.....			917 97			
T. C. Chisholm	do			410 40			
Consumers' Gas Co.	Gas Supply			1,129 25			
Metropolitan Water Co.	Water Supply			100 00			
S. Meadows	Reflectors, &c., in Post Office			400 00			
Geo. Harding	Plumbing and Gas Fitting			35 71			
Jno. Boxall	Tinsmithing			148 90			
T. Lalor	Locksmithing			6 90			
D. Grant	Carpenter Work			283 00			
Robt. Bell.....	Glazing			143 76			
P. Paterson & Son	Hardware			55 17			
J. B. Smith	Lumber			49 61			
Glover Harrison	Glassware			97 45			
James E. Ellis	Paints, &c.			18 66			
W. Law and others	Clock			25 00			
A. Peck	Clearing Snow			57 80			
D. Devlin	Leveling Grounds			197 94			
James Fleming	do			23 00			
James Maxwell	Shrubs, Flowers, &c.			31 86			
R. Rennie.....	Repairing Roof.....			88 73			
W. Anderson	do			15 00			
J. Tracy	Whitewashing			20 00			
A. Morrison	Chimney Sweeping			5 60			
Hy. Graham & Co.	To pay Street Watering.....			25 00			
P. O'Brien	Matting			6 80			
Toronto Globe	Carting			3 60			
do	Advertising			3 50			
do	do			5 00			
do	do			3 50			
	<i>Sessional Writers, Messengers and Pages.</i>				4,309 11		
E. Stevenson	Services as extra Clerk at \$3.00 per diem.....			40 00			
F. G. Joseph	do			122 00			
T. D. Delamere	do			212 00			
J. M. Delamere	do			54 00			
R. A. Kent	do			35 00			

Robt. Esen.....	Services as extra Clerk at \$2.00 per diem.....	32 00			
Thos. Gobert.....	do.....	25 00			
A. M. Fraser.....	do.....	30 00			
H. S. Hill.....	do.....	18 00			
Jno. A. Barron.....	do.....	28 00			
C. G. Snider.....	do.....	22 00			
Francis Clark.....	do.....	10 00			
P. Walsh.....	Services as Messenger at 1.25 do.....	35 00			
C. McLennan.....	do.....	35 00			
Robt. Leach.....	do.....	25 00			
Robt. Armonr.....	do.....	12 00			
Hy. Thompson.....	do.....	20 00			
Wm. Kennedy.....	do.....	30 00			
Wm. Purdy.....	do.....	10 00			
Thos. Ross.....	do.....	32 50			
Dennis Kanan.....	do.....	40 00			
M. W. Hurd.....	Services as Fireman at 1.25 do.....	5 00			
J. B. Fleming.....	do.....	5 00			
J. McDonald.....	Services as Page at .75 do.....	5 00			
T. B. O'Reilly.....	do.....	5 00			
M. Hickey.....	Dusting.....	10 00			
M. Phillips.....	do.....	19 00			
E. Beal.....	do.....	28 55			
M. McNulty.....	do.....	13 00			
	do.....	7 00			
			960 05		
Joseph Lesslie.....	Postage.....	1,179 66			
Jno. Buckley.....	Carrying Mails.....	240 00			
Hunter, Rose & Co.....	Postage Stamps.....	84 16			
			1,503 82		
Hunter, Rose & Co.....	Stationery, including Printing Paper, Printing and Binding.....				
Jos. Barber, Jr.....	Printing, &c.....	7,462 25			
Jno. Notman.....	Paper.....	3,419 86			
	Stationery, &c.....	273 88			
			11,155 99		
Hunter, Rose & Co.....	Printing, Binding and Distributing Statutes.....				
Express Co.....	Printing and Binding.....	1,359 50			
	Charges.....	1 75			
			1,361 25		
Jno. P. Roblin.....	Expenses of Elections.....				
Hunter, Rose & Co.....	Services as Returning Officer, County Prince Edward.....	290 66			
Wm. Ferguson.....	Printing.....	28 82			
	One-half of amount claimed re Frontenac Elections, '67.....	21 57			
			341 05		
			30,900 84		
					104,960 35

Carried forward

Legislation—Concluded.—Administration of Justice.

TO WHOM PAID.	SERVICE.	\$ cts.	\$ cts.	\$ cts.
	<i>Brought forward.....</i>		30,300 34	104,009 35
	<i>Increase of Library.</i>			
Adam, Stevenson & Co.	Books	405 95		
Hunter, Rose & Co.	Binding	382 18		
Edward G. Allen.....	do	33 35		
A. Gordon.....	Newspaper Files	119 47		
Wm. Cook.....	do	154 50		
H. Bomer.....	One Vol. American Statutes	7 00		
A. Gordon.....	Duty and Freight on Imported Goods	4 76	1,107 21	
	<i>Indemnity to Members.</i>			
	To Pay Indemnity to Members, including Mileage		5,480 32	37,487 87
12 Jno. Notman				
	ADMINISTRATION OF JUSTICE.			
	COURT OF CHANCERY.			
	<i>Salaries.</i>			
A. N. Buell	Ten months' salary as Master to 1st October, 1870, at \$2,240 per annum.....	1,805 66		
Do	Two months' salary as Accountant to 31st December, 1870, at \$2,240 per annum	373 34		
Jno. A. Payd	do	373 34		
Geo. Hemings	Master, do	266 66		
Walter M. Ross	Taxing Officer to 28th February, 1870, at \$1,600 per annum	1,000 00		
Jno. P. Macdonald.....	Twelve months' salary as Senior Clerk to 31st December, 1870.....	900 00		
A. Grant	do	1,840 00		
A. Holmesed	Registrar	1,000 00		
Thos. Gray	Clerk	1,000 00		
W. Cummings.....	do	1,000 00		
F. Arnoldi.....	do	600 00		
A. F. Maclean	do	500 00		
D. Suderland	Usher and Messenger to 31st December, 1870	450 00		
W. D. Crofton.....	do	365 00		

Sir James Lukin Robinson	Twelve months' salary as Surrogate Court Clerk to 31st December, 1870	Contingencies.	For the year ended 31st December, 1870, as per Statement No. 13.....	1,000 00 13,135 00 1,447 36 14,582 36
COURT OF QUEEN'S BENCH.				
Salaries.				
Robt. G. Dalton.....	Twelve months' salary as Clerk of the Crown to 31st December, 1870			1,840 00
John Small	do do do			1,200 00
Wm. Lynes	do do do			1,000 00
Alan Cameron.....	do do do			1,400 00
James Alexander.....	do do do			500 00
Andrew Fleming.....	Housekeeper and Messenger to 31st December, 1870			160 00
Dennis O'Connell.....	do do do			160 00
	Messenger			160 00
	Contingencies.			6,250 00
	For the year ended 31st December, 1870, as per Statement No. 13.....			644 99
COURT OF COMMON PLEAS.				
Salaries.				
M. B. Jackson.....	Twelve months' salary as Clerk of the Crown to 31st December, 1870			1,840 00
S. B. Clark	do do do			1,200 00
B. T. Jackson	do do do			1,060 00
P. O'Connell.....	do do do			160 00
	Usher and Crier			160 00
	Contingencies.			4,200 00
	For the year ended 31st December, 1870, as per Statement No. 13.....			163 66
CROWN COUNSEL—CRIMINAL PROSECUTIONS.				
Hon. J. H. Cameron.....	Services as Crown Counsel at York Winter Assizes, 1869 ...			314 00
Do	do do do			330 00
Do	do do do			668 00
James Stanton.....	York Spring Assizes, 1870.....			26 00
Do	do do do			112 00
D. B. Read	Elgin do do 1869.....			64 00
Do	do do do 1870.....			194 00
	Brant do do			
	Wentworth Spring Assizes, 1870.....			
	Carried forward.....			1,708 00
			25,851 01	142,337 22

Administration of Justice—Continued.

TO WHOM PAID.	SERVICE.	\$ cts.	\$ cts.	\$ cts.
<i>Brought forward.....</i>				
CROWN COUNSEL—CRIMINAL PROSECUTIONS—Continued.				
<i>Services as Crown Counsel at Welland Fall Assizes, 1870</i>				
D. B. Read	Leeds and Grenville Spring Assizes, 1870	162 00		
E. J. Senkler, Jr.	do do Fall	34 00		
Do	do do	171 50		
J. D. Armour	Northumberland and Durham Spring Assizes, 1870	132 00		
R. Macdonald	do do	190 00		
Do	Lincoln Spring Assizes, 1870	324 00		
G. B. L. Fellowes	do do Fall	102 00		
Do	Frontenac Spring do	68 00		
Do	Renfrew do	88 00		
Do	Carleton Fall do	46 00		
L. D. Raymond	Welland Spring do	40 00		
Geo. Green	Peel do	14 00		
M. O'Reilly	Halton do	138 00		
Do	Oxford do	58 75		
P. O'Reilly	Hastings Fall do	96 00		
R. A. Harrison	Simcoe Spring do	66 00		
Do	Grey do	66 00		
Do	Middlesex do	295 61		
H. C. R. Becher	do do Fall	98 00		
Do	Perth Spring do	84 00		
Do	Kent do	110 00		
Do	Leamton Fall do	194 00		
Do	Elgin and Essex Fall Assizes, 1870	120 00		
Jno. Duggan	Essex Spring do	56 00		
Do	Haldimand Spring do	132 45		
Do	Northumberland and Durham Fall Assizes, 1870	104 00		
Do	Norfolk Spring Assizes, 1870	148 00		
Do	do do Fall	86 00		
Do	Hastings Spring do	178 50		
Hon. S. Smith	Victoria and Peterboro' Fall Assizes, 1870	56 00		
Do	do do	123 00		
Philip Low	Prince Edward Spring do	38 00		
Do	do do Fall	68 00		
Chris. Robinson	Leamton Spring do	158 00		
Do	Huron do	122 60		
Do	Bruce, Huron and Perth Fall do	313 00		
A. N. Richards	Carleton Spring do	26 00		
Do	Lanark, Renfrew and Frontenac Fall Assizes, 1870			
Kenneth Mackenzie	Wellington Spring Assizes, 1870			
		1,703 00	25,351 01	142,397 22

Do	Waterloo do	20 00
Do	Simcoe Fall do	199 00
Jno. T. Anderson	Grey do	72 00
Do	Wellington Fall do	90 00
Do	Lennox and Addington, and Oxford Fall Assizes, 1870.	32 00
Donald Fraser	Perth Fall Assizes, 1869, and Spring Assizes, 1870	52 00
W. A. Reeve	Lennox and Addington Spring Assizes, 1870	46 00
H. H. Loucks	Kentville Fall Assizes, 1870	26 00
S. H. Cochrane	Ontario do	78 00
Jno. Dewar, Jr.	Haltou do	6 00
Wm. Douglas	Kent do	66 00
W. H. Bowley	Waterloo do	64 00
G. R. Van Norman	Brant do	150 00
		6,917 61
Chas. R. Biggar	Treasurer County of Brant, expenditure for September and December quarters, 1869, March and June quarters, 1870	3,583 94
Alex. Spruiet	Treasurer County of Bruce, expenditure for December quarter, 1869, March, June and September quarters, 1870	1,648 90
Z. Willson	Treasurer County of Carleton, expenditure for September and December quarters, 1869, March and June quarters, 1870	2,924 46
Geo. T. Claris	Treasurer County of Elgin, expenditure for December quarter, 1869, March, June and September quarters, 1870	3,291 31
Thos. H. Wright	Treasurer County of Essex, expenditure for December quarter, 1869, March and June quarters, 1870	2,295 04
Jno. Irvine	Treasurer County of Frontenac, expenditure for December quarter, 1869, March and June quarters, 1870	2,436 40
F. Le Pau	Treasurer County of Grey, expenditure for December quarter, 1869, March, June and September quarters, 1870	2,505 12
A. P. Farrell	Treasurer County of Haldimand, expenditure for September and December quarters, 1869, March, June and September quarters, 1870	2,733 95
F. McCallum	Treasurer County of Halton, expenditure for June, September and December quarters, 1869, March and June quarters, 1870	1,202 81
F. McAnany	Treasurer County of Hastings, expenditure for December quarter, 1869, March, June and September quarters, 1870	1,879 71
A. M. Ross	Treasurer County of Huron, expenditure for December quarter, 1869, March, June and September quarters, 1870	2,782 85
C. G. Charteris	Treasurer County of Kent, expenditure for December quarter, 1869, March, June and September quarters, 1870	2,434 55
Hon. A. Vidal	Treasurer County of Lambton, expenditure for December quarter, 1869, March, June and September quarters, 1870	2,407 01
Jno. P. Fraser	Treasurer County of Lanark, expenditure for December quarter, 1869, March, June and September quarters, 1870	970 70
J. L. Schofield	Treasurer Counties of Leeds and Grenville, expenditure for December quarter, 1869, March and June quarters, 1870	3,119 25
E. Hooper	Treasurer Counties of Lennox and Addington, expenditure for December quarter, 1869, March, June and September quarters, 1870	1,250 45
		32,768 62
	Carried forward	142,587 22

Administration of Justice—Continued.

TO WHOM PAID.	SERVICE.	\$ cts.		\$ cts.	
		\$	cts.	\$	cts.
	<i>Brought forward</i>	37,442	45	32,768	62
					142,397 22
ADMINISTRATION OF CRIMINAL JUSTICE—Continued.					
G. P. M. Ball	Treasurer County of Lincoln, expenditure for September and December quarters, 1869, March, June and September quarters, 1870	5,195	06		
Adam Murray	Treasurer County of Middlesex, expenditure for September and December quarters, 1869, March, June and September quarters, 1870	7,858	38		
Hy. Groff	Treasurer County of Norfolk, expenditure for December quarter, 1869, March, June and September quarters, 1870	2,610	77		
Hon. A. A. Barnham	Treasurer Counties of Northumberland and Durham, expenditure for December quarter, 1869, March and June quarters, 1870	3,523	00		
Wm. Paxton	Treasurer County of Ontario, expenditure for September and December quarters, 1869, March and June quarters, 1870	2,009	38		
22 H. P. Brown	Treasurer County of Oxford, expenditure for September and December quarters, 1869, March, June and September quarters, 1870	3,429	43		
Geo. Graham	Treasurer County of Peel, expenditure for December quarter, 1869, March, June and September quarters, 1870	1,292	44		
A. Monteith	Treasurer County of Perth, expenditure for December quarter, 1869, March, June and September quarters, 1870	2,251	90		
E. Pearse	Treasurer County of Peterboro', expenditure for September and December quarters, 1869, March, June and September quarters, 1870	1,411	99		
J. W. Marston	Treasurer Counties of Prescott and Russell, expenditure for December quarter, 1869, March, June and September quarters, 1870	1,016	99		
R. J. Chapman	Treasurer County of Prince Edward, expenditure for December quarter, 1869, March, June and September quarters, 1870	1,177	36		
A. Irving	Treasurer County of Renfrew, expenditure for September and December quarters, 1869, March, June and September quarters, 1870	650	23		
H. R. A. Boys	Treasurer County of Simcoe, expenditure for December quarter, 1869, March and June quarters, 1870	1,241	40		
R. Macdonald	Treasurer Counties of Stormont, Dundas and Glengarry, expenditure for December quarter, 1869, March, June and September quarters, 1870	1,063	81		
S. C. Wood	Treasurer County of Victoria, expenditure for September and December quarters, 1869, March and June quarters, 1870	1,554	49		
Chas. Stanton	Treasurer County of Waterloo, expenditure for December quarter, 1869, March, June and September quarters, 1870	3,267	30		
Wm. Reynolds	Treasurer County of Wellington, expenditure for December quarter, 1869, March, June and September quarters, 1870	2,739	42		
James McGlashan	Treasurer County of Welford, expenditure for September and December quarters, 1869, March, June and September quarters, 1870	3,078	09		

James Kirkpatrick.....	Treasurer County of Wentworth, expenditure for December quarter, 1869, March, June and September quarters, 1870.....	5,416 81		
J. Macdonald.....	Treasurer County of York, expenditure for December quarter, 1869, to September quarter, 1870.....	9,078 53		
R. Coghill.....	Prisoners' Van for County of York.....	200 00		
R. W. Kerr.....	Chamberlain, City of Hamilton, expenditure for December quarter, 1869, March and June quarters, 1870.....	746 92		
A. T. McCord.....	Chamberlain, City of Toronto, expenditure for December quarter, 1869, March, June and September quarters, 1870.....	4,544 05		
W. H. Thompson.....	Chamberlain, City of Ottawa, expenditure for December quarter, 1869, and September quarter, 1870.....	292 11	103,152 31	
SPECIAL SERVICES.				
Christopher Robinson.....	In re the Queen v. Melady.....	166 80		
Do.....	do do.....	154 25		
Do.....	Patk. Whelan.....	647 00		
Jno. Macdonald.....	do do.....	160 78		
B. Trainor.....	do do.....	78 67		
Chas. Hutchinson.....	do do.....	171 45		
D. B. Read.....	do do.....	39 60		
James Gowan.....	do do.....	50 00		
Rolland Macdonald.....	Abduction of A. McDermid.....	200 00		
Prof. H. Croft.....	do the Queen v. Primrose.....	20 00		
P. McGregor.....	Analysis in connection with Pettit poisoning case.....	15 84		
Do.....	In re Attorney-General v. Lynch.....	92 46		
Do.....	do the Town of Dundas v. the Desjardins Canal Co.....	15 60		
Do.....	do the Queen v. Sheldon, Knowles and Murphy.....	17 30	1,829 15	
Do.....	do McGregor Trusts.....			
DEPUTY CLERKS OF THE CROWN AND PLEAS.				
W. Rubidge.....	Salary as Deputy Clerk of the Crown and Pleas, County of Brant, from 1st January to 31st December, 1870.....	300 00		
Wm. Gunn.....	do do.....	300 00		
Jas. Fraser.....	do do.....	400 00		
T. D. Warren.....	do do.....	400 00		
D. A. McMullin.....	do do.....	400 00		
T. L. Maroon.....	do do.....	225 00		
P. O'Reilly.....	do do.....	75 00		
P. Inglis.....	do do.....	400 00		
R. V. Griffith.....	do do.....	300 00		
W. L. P. Eager.....	do do.....	300 00		
A. G. Northrup.....	do do.....	300 00		
Hugh Johnston.....	do do.....	400 00		
T. A. Ireland.....	do do.....	300 00		
W. A. Campbell.....	do do.....	300 00		
J. R. Gennell.....	do do.....	50 00		
Chas. Rice.....	do do.....	300 00		
Arch. Thompson.....	do do.....	400 00		
	do do.....	300 00		
	Carried forward.....	5,050 00	137,750 08	142,397 22

Administration of Justice.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward.....</i>	5,030	00	137,750	08	142,397	22
	DEPUTY CLERKS OF THE CROWN AND PLEAS.—Continued.						
Sam. Reynolds, Jr.....	Salary as Deputy Clerk of the Crown and Pleas, Counties of Leeds and Grenville, from 1st January to 31st December, 1870.....		400	00			
J. B. McGuin.....	do.....		400	00			
F. A. B. Clench.....	do.....		400	00			
J. McBeth.....	do.....		400	00			
C. C. Kapaljie.....	do.....		400	00			
R. D. Chatterton.....	do.....		400	00			
J. B. Han.....	do.....		400	00			
Jas. Canfield.....	do.....		400	00			
Jas. A. Austin.....	do.....		300	00			
Jas. McFadden.....	do.....		300	00			
N. J. Twigg.....	do.....		300	00			
Thos. Fortye.....	do.....		300	00			
J. W. Marston.....	do.....		300	00			
R. Macdonald.....	do.....		405	00			
J. C. Morrow.....	do.....		300	00			
W. Grace.....	do.....		300	00			
Jas. Colquhoun.....	do.....		300	00			
J. P. Wilson.....	do.....		300	00			
Jas. Hough.....	do.....		300	00			
S. H. Ghent.....	do.....		400	00	12,050	00	
	MISCELLANEOUS JUSTICE.						
	<i>Administration of Justice in Algoma, &c.</i>						
Hon. J. H. Cameron.....	Annual Grant to Law Society for expense of lighting and heating Osgoode Hall, Toronto.....	3,000	00				
F. W. Jarvis.....	Sheriff of York, Services attending sittings, Courts of Queen's Bench and Chancery.....	278	66				
Jas. Maughan.....	do Grey, do.....	40	00				
J. Smith.....	do Brant, do.....	35	00				
J. McEwan.....	do Essex, do.....	52	00				
J. Macdonald.....	do Huron, do.....	56	00				
A. M. Ross.....	do Oxford, do.....	80	50				
E. Deedes.....	do Norfolk, do.....	19	00				
Wm. Glass.....	do Middlesex, do.....	106	60				

Jas. A. Woodruff	do	Lincoln,	do	do	51 00
F. G. Dickenson	do	Leeds and	do	do	31 00
G. Taylor	do	Hastings,	do	do	57 00
Jas. Flintoft	do	Lambton,	do	do	16 00
D. McIntyre	do	Stormont,	do	do	42 00
R. M. Waddell	do	Northumberland and	do	do	76 60
Wm. Ferguson	do	Frontenac,	do	do	59 00
Jas. Hall	do	Peterboro',	do	do	45 50
N. G. Reynolds	do	Ontario,	do	do	41 00
W. F. Powell	do	Carleton,	do	do	22 00
Geo. J. Grange	do	Wellington,	do	do	87 50
R. Modderwell	do	Perth,	do	do	63 40
E. C. Thomas	do	Wentworth,	do	do	45 00
R. Carney	Twelve months' salary as Treasurer and Sheriff, Algona, to 31st December, 1870				1,400 00
J. Doran	do	do	do	do	1,400 00
J. M. Hamilton	do	Stipendiary Magistrate, Nipissing,	do	do	800 00
Hy. Pilgrim	do	Clerk of the Peace, Algona,	do	do	500 00
J. M. Savage	do	Clerk of District Court, Algona,	do	do	800 00
C. W. Lount	do	Registrar,	do	do	1,000 00
J. W. Rose	do	Stipendiary Magistrate, Muskoka,	do	do	817 77
W. Knibidge	do	Stipendiary Magistrate, Parry Sound,	do	do	40 55
Wm. Gunn	do	Deputy Clerk of the Crown and Pleas, Brant, for services as Clerk of Assize, &c.,	do	do	24 14
J. Frazer	do	Bruce,	do	do	36 71
T. D. Warren	do	Carleton,	do	do	32 75
F. E. Marcon	do	Elgin,	do	do	20 68
D. A. McMullin	do	Essex,	do	do	16 00
P. O'Reilly	do	do	do	do	60 50
P. Inglis	do	Frontenac,	do	do	28 50
R. V. Griffith	do	Grey,	do	do	20 49
W. L. P. Eager	do	Haldimand,	do	do	12 07
A. G. Northrup	do	Halton,	do	do	68 60
Hugh Johnston	do	Hastings,	do	do	50 00
J. A. Ireland	do	Huron,	do	do	12 40
C. Rice	do	Kent,	do	do	16 52
Samuel Reynolds	do	Lanark,	do	do	32 74
J. B. McTuire	do	Leeds and Grenville,	do	do	36 42
T. A. B. Clench	do	Lennox and Addington,	do	do	49 70
John McBeth	do	Lincoln,	do	do	88 40
C. C. Rapalje	do	Midsex,	do	do	40 57
R. D. Chatterton	do	Norfolk,	do	do	56 50
J. V. Ham	do	Northumberland and Durham,	do	do	44 32
James Cunfield	do	Ontario,	do	do	36 47
J. A. Austin	do	Oxford,	do	do	20 27
James McFadden	do	Peel,	do	do	32 60
John Twigg	do	Perth,	do	do	40 58
Thomas Fortye	do	Prince Edward,	do	do	28 45
J. W. Marston	do	Peterboro,	do	do	16 40
A. Thompson	do	Prescott and Russell,	do	do	16 36
J. C. Morrow	do	Renfrew,	do	do	72 73
		Simcoe,	do	do	
Carried forward.....					12,075 35
					149,800 08
					142,397 22

Administration of Justice.—*Concluded*.—Public Works and Buildings.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
R. Macdonald	<i>Brought forward</i>	12,075	35	149,800	08	142,387	22
	MISCELLANEOUS JUSTICE. — <i>Continued</i> .						
	Treasury Clerk of the Crown and Pleas, Stormont, Dundas and Clerguary, for services as Clerk of Assize, &c.....						
Wm. Grace	do	24	00				
James O'Brien	do	32	75				
Isaac P. Wilson	do	24	15				
James Hough	do	44	53				
S. H. Ghent	do	40	41				
Richard Carney	do	120	40				
D. D. Van Norman	Criminal Justice expenditure, Algoma.....	2,108	53				
J. Rordan	Services as Justice of the Peace, Thunder Bay.....	510	00				
Steamer Algoma	Furnish supplied D. D. Van Norman.....	10	00				
	Expenses of Sheriff and six witnesses from Sault Ste. Marie to Little Current and return.....	63	00				
J. M. Hamilton	Expenses re Nicholson case.....	191	03				
Ambrose Serrett	Site for lock-up, Thunder Bay.....	60	00				
C. W. Lount	Disbursements, Muskoka.....	342	07				
Copp, Clark & Co	Forms, &c., supplied C. W. Lount.....	43	69				
J. W. Rose	Travelling expenses.....	50	00				
John Doran	Disbursements, Nipissing.....	121	24				
W. A. Campbell	Services as temporary P. C., C. & P., Kent.....	15	00				
R. G. Dalton	Services as Clerk of Assize.....	98	00				
M. B. Jackson	do	93	00	16,068	17		
	REPAIRS, OSGOODE HALL.						
Jno. Boxall	Tinsmithing.....			72	55		
	SEALS AND OTHER CONTINGENCIES.						
J. T. Rolph	Seal for 5th Division Court, Ontario.....	10	00				
do	do	10	00				
J. Hall	do	7	00				
do	do	10	00				
C. Bourne	do	4	72				
W. F. Wells, Jr.	do	18	00				
James Fraser	do	3	50				
A. Murray	do						

SALARIES, SUPERIOR COURT JUDGES.				
On account of salary as President, Court of Error and Appeal.....	1,000 00			
do do Chief Justice, Court of Queen's Bench.....	1,000 00			
do do do Common Pleas.....	1,000 00			
do do do Queen's Bench.....	1,000 00			
do do do do.....	1,000 00			
do do do Common Pleas.....	1,000 00			
do do do do.....	1,000 00			
Chancellor.....	1,000 00			
Vice-Chancellor.....	1,000 00			
do.....	1,000 00			
GRATUITIES TO RECORDERS.				
Compensation for loss of Office as Recorder, Kingston.....	1,000 00			
do do do Hamilton.....	1,000 00			
do do do London.....	1,000 00			
do do do Ottawa.....	1,000 00			
PUBLIC WORKS AND BUILDINGS.				
LONDON LUNATIC ASYLUM.				
On account of contract.....	71,150 00			
do do do.....	25,026 84			
do do do.....	25,292 92			
do do do.....	5,525 00			
do do do.....	11,483 00			
do do do.....	2,400 00			
do do do.....	1,967 63			
Twelve months' salary as Clerk of Works to 31st December, 1870.....	939 00			
do do Foreman of Works, do.....	782 50			
do do do.....	2,000 00			
do do do.....	707 30			
do do do.....	234 71			
do do do.....	104 23			
do do do.....	497 30			
do do do.....	617 43			
do do do.....	122 00			
do do do.....	3,132 06			
do do do.....	602 72			
do do do.....	478 00			
do do do.....	1,203 20			
do do do.....	785 00			
do do do.....	906 50			
do do do.....	300 00			
do do do.....	250 00			
do do do.....	156,678 43			
Carried forward.....				
180,604 02				
4,000 00				
10,000 00				
322,401 24				

Public Works and Buildings.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.
<i>Brought forward.....</i>		156,678	43	322,401	24
<i>LONDON LUNATIC ASYLUM.—Continued.</i>					
E. A. Taylor	Printing and Binding	167	00		
Hunter, Rose & Co.	do	1	92		
F. Finch	Engraving	4	00		
J. Deadman	Painting	180	90		
J. Hance	Work on Roads	96	25		
Wm. Edwards	To pay sundry newspapers for advertising tenders	132	89		
Hon. J. S. Macdonald	Expenses selecting site	25	74		
Kivas Tully	Travelling expenses	199	75		
J. W. Langmuir	do	69	00		
F. T. Jones	do	15	75		
<i>Charged to Capital Account.....</i>				157,561	63
<i>Toronto Lunatic Asylum.</i>					
John Boxall	On account of contract	4,100	00		
Greenlees Armstrong & Bills	do	1,478	66		
John Greenlees	do	424	95		
G. Pearey & Son	do	823	47		
D. & J. McDonald	do	2,826	00		
Dickey, Neill & Co.	do	4,963	00		
Scott & Stollery	do	297	69		
George Ringham	do	940	00		
D. S. Keith	do	560	50		
M. Hynes	do	2,616	45		
Geo. Harding	do	825	36		
John Marvin	On account of salary as Clerk of Works	312	00		
A. McCormick	Brickwork	185	00		
Thos. Nightingale	do	80	00		
J. Morris	do	70	00		
P. Paterson & Son	Hardware	539	81		
T. Lalor	do	12	00		
N. L. Piper	Stoves, &c.	683	75		
Clementson Bros	Earthenware	281	39		
Patton & Co.	Glassware	30	53		
W. H. Rice, Jr.	Fenders	105	00		
Geo. Winks & Co.	Carpetting	110	75		

Mr. Graham & Co.	do	128 90
Oshawa Cabinet Manufacturing Co.	Bedsteads, Mattresses, &c.	17 86
Geo. Moorhead	do	19 00
J. J. Brennan	do	20 75
A. M. McKay	do	16 67
Bowmanville Cabinet Manufacturing Co.	do	15 75
G. J. Stevens	do	22 43
Jacques & Hay	do	3,469 60
James Morry	do	4 13
J. Ferguson	do	2 20
Wingfield & Thomas	do	13 52
Carlie, Ewan & Co.	Blankets	677 14
A. R. McMaster	Dry Goods	444 36
E. S. Williams & Co.	Piano	300 00
Chas. Carnegie	Clocks	28 50
V. Casci	Busts and Statuettes	136 40
Jno. B. Dixon	Billiard and Bagatelle Tables	200 00
R. W. Laird	Engravings	319 90
H. A. Fell	do	24 70
E. Bescohy	Lime	12 00
Jno. Fraser	Freight, &c.	100 36
J. Shedden	Cartage	4 50
Express Co.	Express charges, &c.	1 65
Hunter, Rose & Co.	Printing	1 28
Wm. Edwards	To pay sundry newspapers for advertising tenders	106 09
	Less amount realised from sale of plant	28,354 03
	Charged to Capital Account	2,121 27
		26,232 76
	DEAF AND DUMB INSTITUTE, BELLEVILLE.	
C. W. & T. L. Kempster	On account of contract	30,385 00
James Price	Ten months' salary as Clerk of Works at \$3.00 per diem	783 00
Wm. M. Kelly	Articles furnished from Reformatory	715 00
G. S. Tickell	Furnishings	1,006 35
Clementson Bros.	Earthenware	272 26
J. Fraser	Duty and Freight on Earthenware	106 23
N. L. Piper	Stoves	136 00
James Glass	Cutlery, &c.	123 53
Hy. Graham & Co.	Carpetting	222 65
Jacques & Hay	Mattresses, &c.	1,049 00
Geo. Winks & Co.	Blankets	282 07
Jno. Fraser	Quilts, Sheetting, &c.	506 40
Bryce, McMurrich & Co.	do	653 52
W. H. & T. B. Graham	Cotton, &c.	80 39
	Carried forward	36,321 40
		183,794 39
		322,401 24

Carried forward.

Public Works and Buildings.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward.</i>	36,321	40	183,794	39	322,401	24
J. Edwards	Books	22	45				
Northern Railway Co.	Freight	30	00				
Grand Trunk Railway Co.	do	35	58				
Wm. Edwards	To pay sundry newspapers for advertising tenders	11	10				
K. Tully	Travelling expenses	77	00				
	Charged to Capital Account.			36,497	53		
	ASYLUM FOR THE BLIND, BRANTFORD.						
C. W. & T. L. Kempster	On account of contract	5,825	00				
Jno. Turner	Three months' salary as Clerk of Works at \$3.00 per diem	234	00				
Reginald Henwood	Purchase money of site	8,462	50				
O. Robinson	Surveying	23	00				
W. R. Strickland	Services as Draughtsman at \$3 per diem	327	00				
Do	Travelling expenses	12	00				
W. J. S. Howell	do	7	60				
Do	Services as Draughtsman at \$3.00 per diem	144	00				
Geo. H. Sykes	do	40	00				
Hon. J. S. Macdonald	Expenses selecting site	10	00				
Cameron & Wilson	Law Fees	69	91				
Hunter, Rose & Co.	Printing	49	74				
Express Co.	Express charges, &c.	4	35				
Kivas Tully	Travelling expenses	48	50				
J. W. Langmuir	do	29	60				
Hon. S. Richards	do	4	75				
Wm. Edwards	do	4	45				
Do	To pay sundry newspapers for advertising tenders	237	54				
	Charged to Capital Account.			15,533	94		
	GOVERNMENT HOUSE, TORONTO.						
Grant & Yorke	On account of contract	9,379	78				
Jno. Greenlees	do	824	75				
Gundry & Langley	Balance of commission on cost of Building	692	30				
De Zouche Bros.	(G.D.) Lique, Kitchen range, Statuettes, &c.	3,461	17				

P. Paterson & Son	Hardware	24 03	
N. L. Piper & Son	do	37 88	
Wm. Hewitt	do	7 95	
E. Davies	do	42 50	
Geo. Harding	Plumbing and Gas fitting	230 66	
M. O'Connor	Painting	168 70	
Jno. B. Smith	Lumber	41 95	
D. Grant	Carpenter work	175 00	
E. Butt	Plastering	20 00	
J. Edwards	Wall Paper, &c.	1,737 30	
Jacques & Hay	Furniture	15,715 20	
Plant & Warwood	do	90 00	
J. Davis & Co.	do	267 75	
F. W. Caste.	do	21 00	
A. Peck	Solding	595 14	
P. Latham	To pay men employed laying out grounds	2,982 72	
Geo. Leslie & Son	Plants, Shrubs and Flowers	211 80	
D. W. Beadle	do	174 00	
James Fleming	do	91 12	
J. Pape	do	10 00	
P. R. Lamb & Co.	Bone-dust	5 50	
A. Birtchall	Cutting grass	20 00	
D. & J. Macdonald	Sundries	11 81	
Wm. Myles	Fuel	282 00	
Consumers' Gas Co.	Gas, &c.	15 33	
J. Adams	Candles	100 00	
J. Moffatt, Murray & Co.	Cotton	10 06	
Express Co.	Changes	14 65	
M. McKenna	Cleaning	10 00	
P. Latham	Travelling expenses	6 10	
W. J. Smith	Services as Watchman	26 87	
Geo. Stafford	do	28 12	
M. Hoach	do	38 75	
Grant & Yorke	To pay Fireman, &c.	295 50	
Charged to Capital Account.....		37,867 20	
REFORMATORY, PENETANGUISHERE.			
Wm. M. Kelly	Pay lists of men employed	4,581 02	
do	To pay for Engine from P. L. A., Toronto	1,000 00	
P. Paterson & Son	Hardware, Felt, &c.	377 55	
Dickey, Neill & Co.	Sash weights	242 34	
R. Columbus	Stone	6 40	
W. A. Stollery	Tile pipe	198 10	
J. Berry	Brick	102 80	
B. Walton	Slate	650 00	
B. Le Koch	Scaffold poles	21 50	
H. Miller & Co.	Whitelead, Putty, &c.	91 10	
Carried forward.....		7,970 81	
		273,493 15	322,401 24

Public Works and Buildings.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>	7,270	81	273,493	15	322,401	24
	REFORMATORY, PENETANGUISHENE.— <i>Continued.</i>						
A. R. Christie	Coal.....	40	44				
J. G. Thompson	Freight	190	20				
W. Featherstonhaugh	Keeping accounts	40	00				
H. Irving	Travelling expenses.....	9	50				
Kivas Tully	do	40	00				
	Charged to Capital Account.....			7,590	95		
	COURT HOUSE AND GAOL, SAULT STE. MARIE.						
John Damp	On account of contract.....	1,250	00				
R. Carney	To pay men employed	200	00				
R. Tait	Carpenter work	31	84				
J. Carney	Tinware	87	50				
A. McKay	Iron.....	2	50				
Hunter, Rose & Co.....	Printing.....	2	18				
James Price.....	Travelling expenses, inspecting work.....	50	40				
	Charged to Capital Account.....			1,624	42		
	LOCK ON ROSSEAU RIVER, MUSKOKA.						
John Ginty	On account of contract	8,319	50				
Wm. Whiteside	do	1,295	50				
A. G. Robinson	Four months' salary as Clerk of Works, at \$3 per diem	312	00				
do	Eight do	836	00				
do	Disbursements, &c.....	381	12				
Wm. Edwards.....	Pay lists of men employed	128	00				
W. J. S. Holwell	Services as draughtsman	3	90				
Grand Trunk Railway Co.....	Freight.....	36	84				
Sundry persons	Boat hire	65	00				
M. Paty	Services	6	50				
W. Bingham	Hardware	176	00				
T. N. Molesworth	Travelling expenses.....	25	00				
Kivas Tully	do	23	45				
J. G. Ross	do	12	30				
W. J. S. Holwell	do						

		2 10	11,792 27
Wm. Edwards.....	To pay sundry newspapers for advertising tenders.....		
	Charged to Capital Account.....		
	LOCK AT YOUNG'S POINT.		
Macleod & Macdonald	On account of contract	17,774 75	
J. G. Ross.....	Twelve months' salary as Clerk of Works, at \$3 per diem.....	939 00	
do	Travelling expenses.....	8 00	
Kivas Tully	do	14 00	
T. N. Molesworth	do	66 50	
Wm. Edwards.....	To pay for advertising tenders.....	2 10	
	Charged to Capital Account.....		18,804 95
	LOCK BETWEEN BALSAM AND CAMERON LAKES.		
Wm. Whiteside	On account of contract.....	3,740 00	
Wm. Little	Travelling expenses.....	41 00	
T. N. Molesworth	do	15 00	
Wm. Edwards.....	To pay sundry newspapers for advertising tenders.....	41 32	
	Charged to Capital Account.....		3,837 32
	IMPROVEMENT OF NAVIGATION, SCUGOG RIVER.		
Thos. Walters	On account of contract	18,065 00	
Wm. Little	Nine months' salary as Clerk of Works, at \$3 per diem	675 00	
T. N. Molesworth	Travelling expenses.....	116 00	
Kivas Tully	do	25 00	
Wm. Edwards	To pay sundry newspapers for advertising tenders	131 36	
J. G. Ross.....	Exhibiting plans, &c.....	28 25	
	Charged to Capital Account.....		19,040 61
	CUT BETWEEN LAKES JOSEPH AND ROSSEAU.		
Geo. Blain.....	On account of contract.....	6,630 00	
Kivas Tully	Travelling expenses.....	30 00	
T. N. Molesworth	do	30 00	
A. G. Robinson	Sundry disbursements.....	53 80	
Wm. Edwards.....	To pay sundry newspapers for advertising tenders	50 50	
	Charged to Capital Account.....		6,794 30
	WASHAGO AND GRAVENHURST ROAD.		
J. T. Kirkpatrick	On account of contract	10,710 00	
Wade Owen.....	Eight months' salary as Clerk of Works, at \$3 per diem.....	627 00	
	Carried forward.....	11,337 00	442,977 97
			322,401 24

Public Works and Buildings.—Continued.

TO WHOM PAID.	SERVICE	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>	11,337	00	442,977	97	322,401	24
	WASHAGO AND GRAVENHURST ROAD.— <i>Continued.</i>						
Wade Owen	Disbursements and travelling expenses		38 60				
Wm. Edwards	Pay lists of men employed	1,931	30				
J. Blackwell & Co.	Gravel, &c.	1,414	82				
Symington McClelland	do	988	50				
D. Hegaboon	Grading	64	00				
T. Lloyd	do	21	00				
A. Fisher	Timber	122	76				
Municipality of Morrison	do	14	28				
R. H. Cousins	do	73	60				
D. McLennan	do	40	11				
Beecher & Silliman	do	198	43				
Chas. McKenzie	do	50	60				
do	Board of men employed	74	30				
Tudhope & Co.	Hardware	51	35				
W. Bingham	do	45	79				
J. Jackson	do	117	58				
Rice Lewis & Son	do	25	65				
Wilson, Thompson & Co	do	12	80				
Manning & Ginty	do	42	55				
Wm. Hamilton & Son	do	16	20				
Warwick & Emms	do	27	50				
J. Graham	do	9	55				
A. N. Molesworth	Measuring roads	67	10				
J. B. Cockburn	Compensation, land damages	30	00				
Sundry persons	Removing fences, stumps, &c.	20	00				
T. N. Molesworth	Travelling expenses and disbursements	200	16				
Kivas Tully	do	15	00				
Wm. Edwards	do	12	50				
do	To pay sundry newspapers for advertising tenders	131	36				
	Charged to Capital Account.			17,203	43		
	SURVEYS AND DRAINAGE OF SWAMP LANDS.						
Grant & Yorks	On account of contract—drainage in Mosa	6,375	00				
Alex. Armstrong	do	533	25				
W. Barnum	do	5,434	00				

J. Seaton	do	do	do	1,411 00
J. A. Philpot	do	do	Dunwich	3,431 00
Wm. Kingsford	do	do	Russell	4,201 32
Geo. Blain	do	do	Brooke and Grey	3,145 00
Jno. Elliott	do	do	Raleigh	10,714 00
Wm. Edwards	Pay Lists of men employed in the following townships, viz:—			
	Aldborough			120 50
	Brooke			720 37
	Carradoc			27 31
	Cumberland			522 30
	Douro			179 75
	Dunwich			314 65
	Dunwich			62 37
	Ennisillen			361 00
	Enna			229 50
	Ekfrid			340 40
	Gloucester			619 54
	Grey			678 00
	Hay			178 85
	Logan			774 07
	Luther			39 00
	Monaghan, N			815 24
	Moore			270 40
	Mosa			103 00
	McKillop			750 52
	Proton			141 50
	Raleigh			582 80
	Russell			295 99
	Tilbury, E.			241 90
	Westmeath			514 00
	Services as draughtsman, at \$3.00 per diem			80 00
W. J. S. Holwell	do	do	\$1.50 per diem	313 50
W. R. Strickland	do	do	Raleigh and Tilbury	355 00
A. N. Molesworth	do	do	Russell	259 00
A. Macdonald	do	do	Nottawasaga River	77 15
H. O. Wood	do	do	Stephen	45 85
Hy. Creswick	do	do	Dunwich, Ekfrid and Mosa	615 74
B. Springer	do	do	Russell	303 20
T. W. Dyas	do	do	Luther and Proton	84 25
Wm. Ogilvie	do	do	Grey and Stephen	102 00
Hy. McMahon	do	do	.....	43 00
T. Weatherald	do	do	.....	57 95
James Addison	do	do	.....	90 97
W. A. Henderson	do	do	.....	5 55
Jno. M. Keary	do	do	.....	25 00
E. Taylor	do	do	.....	7 00
J. B. Craig	do	do	.....	22 50
James Adams	do	do	.....	3 25
D. Forbes	do	do	.....
R. Johnson	do	do	.....
	Repairing tent			
	Copying			
	Cab hire			
	Carried forward			44,630 85
				460,181 40
				329,401 24

Public Works and Buildings.—*Concluded.*—Asylum Maintenance.—Reformatory.—Immigration.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.
	<i>Brought forward</i>	44,630	85	469,181	40
	SURVEYS AND DRAINAGE OF SWAMP LANDS.— <i>Continued.</i>				
Jno. Clements.....	One table.....	5	00		
Scott and Stollery.....	One level.....	60	00		
Chas. Potter.....	Surveying instruments.....	165	25		
McCrosson & Co.....	Snow shoes.....	32	50		
J. Canavan.....	Services and expenses as Chairman Board of Arbitrators.....	500	00		
T. N. Molesworth.....	Travelling and other expenses.....	486	30		
S. O. McGuin.....	do.....	33	00		
Hunter, Rose & Co.....	Printing.....	86	95		
Express Co.....	Charges.....	4	90		
Wm. Edwards.....	To pay sundry newspapers for advertising tenders.....	367	04		
	Charged to Capital Account.....			46,371	79
	MISCELLANEOUS.				
Geo. Ellison.....	Pay list of men employed at Brock's monument.....	650	75		
do.....	Oil, lead, etc.....	259	80		
P. Paterson Son.....	Wire rope.....	42	55		
Kivas Tully.....	Travelling expenses.....	15	00		
P. Latham.....	do.....	6	35		
Wm. Edwards.....	do.....	6	65		
	Total Public Works and Buildings.....			981	10
				407,734	29
	ASYLUM MAINTENANCE.				
	Maintenance and Salaries of Officers of the Asylum for Insane, Toronto, for the year ending 31st December, 1870, as per Statement No. 15.....	70,818	75		
	Maintenance and Salaries of Officers, Malden Asylum, for the year ending 31st December, 1870, as per Statement No. 16.....	24,552	68		
	Maintenance and Salaries of Officers, Orillia Asylum, for the year ending 31st December, 1870, as per Statement No. 17.....	15,416	55		
	Maintenance and Salaries of Officers, Deaf and Dumb Institute, Belleville, for two months ending 31st December, 1870, as per Statement No. 18.....	5,219	03		

Maintenance and Salaries of Officers of the Asylum for Insane, London, for December, 1870, including removal expenses, as per Statement No. 19	19,145 43	135,452 44
Maintenance and Salaries of Officers, for the year ending 31st December, 1870, as per Statement No. 20.....		22,473 36
REFORMATORY.		
Maintenance and Salaries of Officers, for the year ending 31st December, 1870, as per Statement No. 20.....		22,473 36
IMMIGRATION.		
Expenses Toronto Agency	5,395 75	
do Hamilton do	1,730 00	
do Kingston do	613 25	
do Ottawa do	539 45	
Services and expenses as Special Commissioner of Immigration	5,323 86	
Services in Scotland	855 00	
Salary as Clerk, Immigration Branch, Public Works Department, at \$1.00 per diem.	365 00	
Printing	333 50	
do	9 50	
Postage	6,040 36	
To pay sundry newspapers for advertising.....	282 36	
Copies for distribution	887 50	
do	815 00	
do	435 00	
do	260 25	
Carriage of Immigrants	2,495 51	
do	1,745 50	
do	958 69	
do	8 25	
do	121 75	
do	60 00	
do	34 00	
do	80 30	
do	5 80	
do	618 13	
Expenses attending Immigration Conference, Ottawa.....	25 00	
Expenses visiting Muskoka District with Col. Maude, Rev. S. Herring, and others	120 00	
Attendance on Immigrants	178 80	
Services	110 00	
do	20 00	
do horse hire, &c.	240 52	
Groceries	525 14	
Meat	50 00	
Carried forward.....	31,290 07	888,061 33

Immigration.—Concluded.—Agriculture and Arts.

TO WHOM PAID.	SERVICE.	\$ cts.	\$ cts.	\$ cts.
	<i>Brought forward.....</i>	31,250 07		888,061 33
	IMMIGRATION.—Continued.			
Dunn & Scott	Meat	334 90		
P. Burns	Fuel	110 25		
Wm. Myles	do	58 00		
Wm. Hewitt & Co.....	Hardware	61 11		
H. Piper	do	5 94		
Beard Bros.	Stoves	12 50		
Fallon & Co.	Crockeryware	26 21		
N. L. Piper & Son	Furnishings	85 30		
D. George	Towelling	10 42		
Jno. Silmsen.....	Delivering mails	15 00		
Wm. Edwards.....	Travelling expenses.....	8 90		
Sundry person	Express charges, cab hire, &c.	69 05		32,067 65
	AGRICULTURE AND ARTS.			
	ELECTORAL DIVISION SOCIETIES.			
Hon. Jno. Carling	To pay Legislative Grants to the following Societies, viz:—			
	Addington.....	700 00		
	Algoma	300 00		
	Brant, North.....	700 00		
	Brant, South.....	700 00		
	Bruce, North.....	700 00		
	Bruce, South.....	700 00		
	Bothwell.....	700 00		
	Brockville	250 00		
	Carleton	700 00		
	Cardwell.....	700 00		
	Cornwall.....	350 00		
	Dundas	700 00		
	Durham, East	700 00		
	Durham, West	700 00		
	Elgin, East	700 00		

Elgin, West	700 00
Essex	700 00
Frontenac	700 00
Glengarry	700 00
Grenville, South	700 00
Grey, North	700 00
Grey, South	700 00
Haldimand	700 00
Halton	700 00
Hamilton	350 00
Hastings, North	700 00
Hastings, East	700 00
Hastings, West	700 00
Huron, South	700 00
Huron, North	700 00
Kent	700 00
Kingston	350 00
Lambton	700 00
Lanark, North	700 00
Lanark, South	700 00
Leeds & Grenville, North	700 00
Leeds & Grenville, South	700 00
Lennox	700 00
Lincoln	700 00
London	350 00
Middlesex, North	700 00
Middlesex, East	700 00
Middlesex, West	700 00
Monck	700 00
Niagara	350 00
Northumberland, East	700 00
Northumberland, West	700 00
Norfolk, North	700 00
Norfolk, South	700 00
Ontario, North	700 00
Ontario, South	700 00
Ottawa	350 00
Oxford, North	700 00
Oxford, South	700 00
Peel	700 00
Perth, North	700 00
Perth, South	700 00
Peterboro', East	700 00
Peterboro', West	700 00
Prescott	700 00
Prince Edward	700 00
Renfrew, North	700 00
Renfrew, South	700 00
Russell	700 00
Carried forward.....	41,950 00
	920,148 98

Agriculture and Arts.—*Concluded.*—Hospitals and Charities.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>	41,950 00				920,148 98	
	ELECTORAL DIVISION SOCIETIES.— <i>Continued.</i>						
Hon. John Carling.....	To pay Legislative grants to the following Societies, viz:—						
	Simcoe, North	700 00					
	Simcoe, South	700 00					
	Stormont	700 00					
	Toronto	274 50					
	Victoria, North	700 00					
	Victoria, South	700 00					
	Waterloo, North	700 00					
	Waterloo, South	700 00					
	Wend	700 00					
	Wellington, North	700 00					
	Wellington, Centre.....	700 00					
	Wellington, South	700 00					
	Wentworth, North	700 00					
	Wentworth, South	700 00					
	York, North	700 00					
	York, East.....	700 00					
	York, West	700 00					
				53,424 50			
	MECHANICS' INSTITUTES.						
Hon. John Carling.....	To pay Legislative Grants to the following Institutes, viz:—						
	Ayr	167 00					
	Brantford	200 00					
	Berlin	137 14					
	Brighton	50 00					
	Brampton	30 00					
	Baymanville	150 00					
	Clinton	200 00					
	Collingwood	100 00					
	Dundas	200 00					
	Galt	100 00					
	Hamilton	200 00					
	Meaford	50 00					
	Mount Forest	41 88					

Merrickville	50 00	
Paris	100 00	
Port Elgin	100 00	
Peterboro'	200 00	
Richmond Hill	52 68	
Smith's Falls	60 00	
St. Marys	109 00	
Streetsville	200 00	
Toronto	200 00	
Thorold	100 00	
Woodstock	150 00	
Hon. John Carling	2,947 70	
	10,000 00	
Hon. John Carling	350 00	
		63,722 20

HOSPITALS AND CHARITIES.		
Legislative Grant in aid of		
General Hospital, Toronto	11,200 00	
House of Industry, Toronto	2,900 00	
Protestant Orphans' Home and Female Aid Society, Toronto	640 00	
Roman Catholic Orphan Asylum, Toronto	640 00	
Lying-in Hospital,	480 00	
Magdalen Asylum,	480 00	
House of Providence,	320 00	
Girls' Home and Public Nursery,	320 00	
Boys' Home,	320 00	
Dye and Ear Infirmary,	1,000 00	
General Hospital, Kingston	4,800 00	
House of Industry and Refuge for Indigent Sick, Kingston	2,400 00	
Orphans' Home,	640 00	
Hotel Dieu Hospital,	800 00	
General Hospital, London	2,400 00	
General Hospital, Hamilton	4,800 00	
Roman Catholic Orphan Asylum, Hamilton	640 00	
Protestant Orphan Asylum and Ladies' Benevolent Society,		
Hamilton		
Deaf and Dumb Asylum, Hamilton	640 00	
Protestant Hospital, Ottawa	2,250 00	
Roman Catholic Hospital, Ottawa	1,200 00	
St. Patrick's Orphan Asylum, Ottawa	1,200 00	
Protestant Orphan Asylum, do	480 00	
St. Joseph's Orphan Asylum, do	480 00	
General Hospital, St. Catharines	1,000 00	
		42,510 00
		1,029,381 18

Carried forward		
-----------------------	--	--

Literary and Scientific Institutions.—Education.

TO WHOM PAID.	SERVICE.	cts.	cts.	cts.
	<i>Brought forward</i>			1,029,381 18
	LITERARY AND SCIENTIFIC INSTITUTIONS.			
	Legislative Grant in aid of Canadian Institute, Toronto	750 00		
	do do Ottawa	300 00		
	do do Athenaeum,	300 00		
	EDUCATION.			1,350 00
	EDUCATION OFFICE.			
	<i>Salaries.</i>			
Rev. Dr. Ryerson	Twelve months' salary as Chief Superintendent of Education, to 31st December, 1870.	4,000 00		
J. G. Hodgins	do do do	2,200 00		
Alex. Marling	Chief Clerk	1,600 00		
F. J. Taylor	Clerk of Statistics	1,200 00		
J. T. R. Stinson	do do	900 00		
H. A. Williamson	Assistant Clerk of Statistics			
	Ten months' salary as Clerk of Correspondence, to 31st October, 1870, at \$900 per annum.	750 00		
W. H. Atkinson	Two months' salary as Clerk of Correspondence, to 31st December, 1870, at \$800 per annum.	133 33		
Do	Ten months' salary as Assistant Clerk of Correspondence, to 31st October, 1870, at \$600 per annum.	500 00		
Í. R. Manners	Two months' salary as Assistant Clerk of Correspondence, to 31st December, 1870, at \$500 per annum.	83 34		
D. B. Heath	Two months' salary as Junior Clerk, to 31st December, 1870, at \$200 per annum.	33 33		
James Moore	Twelve months' salary as Messenger, to 31st December, 1870.	413 00		
	<i>Contingencies.</i>			
	For the year ending 31st December, 1870, as per Statement No. 13.....	11,813 00		
		2,582 98		14,395 98
	NORMAL AND MODEL SCHOOLS.			
	<i>Salaries.</i>			
J. H. Sanster	Twelve months' salary as Head Master of the Normal School, to 31st Dec., 1870	2,000 00		
Rev. H. W. Davies	do do do	1,500 00		
Samuel Clare	Second Master	700 00		
Wm. Armstrong	Writing Master	240 00		
	Drawing Master			

H. F. Sefton	do	Music Master	do	400 00	
H. Goodwin	do	Gymnastic Master	do	300 00	
James Carlyle	do	Master Boys' Model School	do	1,000 00	
James Hughes	do	First Assistant	do	700 00	
Wm. Scott	do	Second Assistant	do	600 00	
M. Cullen	do	Mistress Girls'	do	700 00	
C. E. McCausland	do	First Assistant	do	500 00	
L. H. Jones	do	Second Assistant	do	400 00	
John Murphy	do	Janitor	do	300 00	
James Forsyth	do	do	do	340 00	
John Moore	do	do	do	336 00	
Wm. Hodgson	do	do	do	105 00	
Thos. Dwyer	do	Three and one-half months' salary as Engineer, to 15th April, 1870, at \$360 per annum	do	191 09	
R. McCallum	do	Six and one-half months' salary as Engineer, to 31st October, 1870, at \$360 per annum	do	60 00	
James Ryan	do	Two months' salary as Engineer, to 31st December, 1870, at \$360 per annum	do	410 00	
		Twelve months' salary as Furnace-man, to 31st December, 1870	do	10,802 00	
		<i>Contingencies.</i>		6,307 74	17,169 74
		For the year ending 31st December, 1870, as per Statement No. 12			
		DEPOSITORY.			
		<i>Salaries.</i>			
48 P. May	do	Twelve months' salary as Clerk of Libraries, to 31st December, 1870	do	1,200 00	
47 E. B. Cope	do	Ten months' salary as Assistant ditto, to 31st October, 1870, at \$550 per annum	do	453 33	
H. M. Wilkinson	do	Two	do	91 67	
Do	do	to 31st December, 1870	do	375 00	
B. C. Marshall	do	Ten months' salary as Salesman, to 31st October, 1870, at \$450 per annum	do	56 67	
D. B. Heath	do	do	do	105 00	
E. Butt	do	do	do	21 00	
A. Lewis	do	do	do	18 33	
R. J. Bryce	do	do	do	120 00	
Geo. Barber	do	do	do	340 00	
Wm. Lennon	do	do	do	230 00	
		<i>Contingencies.</i>		3,066 00	
		For the year ending 31st December, 1870, as per Statement No. 13		1,417 27	4,483 27
		GRAMMAR SCHOOL INSPECTION.			
Rev. J. G. D. Mackenzie	do	Twelve months' salary as Inspector, to 31st December, 1870	do	2,000 00	
		JOURNAL OF EDUCATION.			
J. G. Hodgins	do	Twelve months' salary as Editor, to 31st December, 1870	do	400 00	
Hunter, Rose & Co.	do	Printing	do	1,400 00	
		<i>Carried forward</i>		1,800 00	
				39,848 99	1,030,731 18

Education.—*Concluded*.—Municipalities' Fund.—Charges on Revenue.—Crown Lands Expenditure.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>			39,818	99	1,030,731	18
	LIBRARIES, APPARATUS AND PRIZES.						
	To meet expenditure of this service, as per detailed Statement No. 23.....			32,414	11		
	MUSEUM.						
	To meet expenditure as per detailed Statement No. 23.....			3,671	92		
	COMMON AND SEPARATE SCHOOLS.						
	To meet expenditure as per detailed Statement No. 23.....			169,952	90		
	POOR SCHOOLS.						
	To meet expenditure as per detailed Statement No. 23.....			6,000	00		
	GRAMMAR SCHOOLS.						
	To meet expenditure as per detailed Statement No. 23.....			57,500	00		
	SUPERANNUATED TEACHERS.						
	To pay Superannuated Teachers, as per detailed Statement No. 23.....			6,500	00	315,887	92
	MUNICIPALITIES' FUND.						
Treasurers of Municipalities	Distribution for 1869, as per detailed Statement No. 21.....					89,313	30
	CHARGES ON REVENUE.						
	<i>Miscellaneous.</i>						
Hunter, Rose & Co.....	Printing—Stamp and License Office						31 60

Jos. Leslie	Postage	11 14		
Jas. Ross	Furnishings	17 75		
John Notman	Stationery	25 52		
J. & J. Taylor	Law Stamp Safes	815 00		
B. A. Bank Note Co.	Law Stamp Plates	4,351 00		
W. Barber & Bros.	Paper for tavern licenses	161 40		
	Postage Stamps re Municipalities Fund	30 00		
				5,412 81
CROWN LANDS EXPENDITURE				
<i>Board of Land Surveyors.</i>				
Hon. S. Richards	To pay expenses, January, April, July and October Sessions, 1870		170 00	
<i>Lands Twice Sold.</i>				
James Benson	In settlement re Lot in Zone	700 00		
S. Bedell	do Melancthon	1,000 00		
A. Johnson	do Tecumseth	100 00		
A. Hamilton	do Melancthon	50 00		
Jas. Garsland	do Carriek	150 00		
			2,030 00	
<i>Agents' Salaries, Commissions and Disbursements.</i>				
J. F. Way	Salary as Agent, Belleville	1,440 00		
J. A. MacInnes	do Clerk, do	800 00		
J. A. G. Crozier	do do	500 00		
J. F. Way	Disbursements	611 00		
W. C. Armstrong	Salary and disbursements as Agent	320 46		
E. Burron	do do	1,000 00		
J. D. Deaty	do do	514 41		
A. Campbell	do do	1,000 00		
J. Graham	do do	532 83		
Chas. W. Lount	do do	1,205 12		
S. Lynn	do do	506 30		
J. P. Moffatt	do do	666 64		
J. Tait	do do	500 00		
E. Playfair	do do	328 08		
D. Anderson	do do	56 16		
H. S. Huber	Commission	1,660 44		
Wm. Jackson	do	406 80		
E. Perry	do	201 72		
G. M. Roche	do	257 28		
J. Sharnan	do	636 53		
A. McNab	do	1,957 89		
	<i>Carried forward.</i>	15,161 66	2,230 00	1,432,375 21

Crown Lands Expenditure.—Continued.

TO WHOM PAID.	SERVICE.	\$ cts.		
		\$	cts.	\$ cts.
	<i>Brought forward</i>	15,161	66	2,230 00
	<i>Agents' Salaries, Commissions and Disbursements.</i> —Continued.			1,432,375 21
J. McPherson.....	Commission.....	177	51	
C. Widder.....	do.....	912	79	
A. S. Cadenhead.....	do.....	192	73	
A. Russell.....	do.....	950	23	
Wm. Halfpenny.....	do.....	233	80	
Jas. Wilson.....	do.....	39	39	
C. F. Holterman.....	do.....	80	78	
A. McDonnell.....	do.....	964	75	
Jos. Shaw.....	Wood-ranging.....	969	93	
A. Christie.....	do.....	295	00	
W. Russell.....	do.....	816	64	
C. Johnson.....	do.....	913	55	
J. McCall.....	do.....	100	00	
P. W. Freeman.....	do.....	871	00	
P. C. Campbell.....	do.....	614	50	
Jno. Rodgers.....	do.....	1,176	00	
J. Graham.....	do.....	57	50	
J. McDonald.....	do.....	75	50	
G. Wardrup.....	do.....	35	00	
W. C. Valentine.....	do.....	32	00	
H. Hanlon.....	do.....	58	00	
W. Langstaff.....	do.....	80	00	
John Menzies.....	do.....	15	00	
T. H. Johnson.....	Inspecting.....	495	66	
W. Bell.....	do.....	120	10	
J. W. Lewis.....	do.....	124	90	
J. Bouchard.....	do.....	100	00	
T. F. Scott.....	Services.....	18	00	
R. Gillmor.....	do.....	97	00	
J. C. Miller.....	Travelling expenses.....	154	15	25,933 07
	<i>Refunds.</i>			
W. R. Talbot.....	Refund on lot in Caradoc.....	31	03	
John Ough.....	do.....	50	30	
W. C. Bruce.....	do.....	51	00	
P. McHarghy.....	do.....	11	25	

A. H. Macdonald	do	8 57
G. D. Dickson	do	615 00
John Lawcett	do	9 77
A. T. Ball	do	98 50
W. Sheppard	do	18 40
N. Kearns	do	17 00
Jas. Jackson	do	10 15
H. Quilly	do	20 00
D. McRae	do	20 21
John Lees	do	13 18
P. Gilchrist	do	50 00
Jos. Devrell	do	45 27
J. McFarlane	do	2 80
J. Herron	do	20 00
A. N. Turney	do	82 60
E. King	do	29 71
J. Macdonald	do	27 50
T. A. Keefer	do	50 00
Jas. Parkins	do	39 72
Jas. Stuart	do	40 00
Do	do	16 80
McCaughney & Holmstead	do	12 70
C. Widdow	do	8 72
Jas. Trace	do	563 52
Wm. McLeod	do	137 85
C. J. Rains	do	11 00
P. Gray	do	7 00
R. Green	do	12 90
Jones Bros.	do	7 80
Do	do	86 35
Do	do	30 25
T. Hall	do	11 40
J. Richardson	do	222 01
D. Cameron	do	30 00
W. Phipps	do	16 74
H. Sothorn	do	13 00
J. E. Butterworth	do	289 00
Cameron & McMichael	do	11 55
J. Cunningham	do	260 78
A. Williams	do	40 00
Jas. Goulie	do	141 81
Robinson, Robinson & O'Brien	do	20 00
P. Hanaghan	do	38 08
G. Bez	do	54 29
R. McNab	do	128 00
E. Walsh	do	30 25
J. Cassidy	do	50 00
A. Smith	do	14 00
W. S. Smith	do	
Carried forward.....		3,637 61
		28,163 07
		1,432,375 21

Crown Lands Expenditure.—Continued.

TO WHOM PAID.		SERVICE.			§	cts.
					§	cts.
		<i>Brought forward.....</i>			3,637	61
		<i>Refunds.—Continued.</i>			28,163	07
					1,432,375	21
H. Gibson.....	Refund on lot in Peel.....				63	26
P. McDonald.....	do Vincent.....				40	00
A. Walker.....	do Minden.....				10	00
N. Rutlan.....	do Kaladar.....				12	00
J. Garriess.....	do Morris.....				100	00
E. Winslow.....	do Gainsborough.....				18	00
A. Clarke.....	do Neebing.....				100	00
W. Rye.....	do Sebastopol.....				20	00
B. McDonald.....	do Warwick.....				20	00
Q. Pearson.....	do Grey.....				301	20
J. McNally.....	do Brant.....				336	60
St. Thomas, Hoar.....	do Galway.....				17	13
D. McMullin.....	do do.....				15	75
S. A. Huntington.....	do Huntington.....				85	65
P. Munroe.....	do McNab.....				83	35
J. W. Hunsford.....	do Vernalan.....				160	00
Lewis Beausoleil.....	do Hungerford.....				100	00
P. O'Donnell.....	do Emsmore.....				37	40
F. Austin.....	do Hamilton.....				546	50
F. McDonnell.....	do Rokeby.....				30	00
Jas. Harris.....	do Carriek.....				6	50
Jas. Rankin.....	do Darling and Levant.....				16	00
Owen Green.....	do Aytoun.....				40	00
F. McDonald.....	do Ikena.....				20	00
John Baines.....	do Luther.....				282	75
T. K. Morgan.....	do Tudor.....				100	00
R. Clelland.....	do Elma.....				10	00
F. McIntyre.....	do Somerville.....				20	00
R. W. Cunningham.....	do Leeds.....				7	40
W. L. Teussell.....	do Dalton.....				20	00
C. S. Turvillager.....	do Dover East.....				36	00
J. Kemp.....	do Ramsay.....				5	00
M. Jordan.....	do Peel.....				24	00
A. Macdonald.....	do Huron.....				86	65
Cronyn & Cronyn.....	do Kinross.....				127	80
J. Rednagh.....	do Lake.....				13	09
J. Keam.....	do Emily.....				12	55

J. Adams	do	Somerville	20 10
J. Knight	do	Grey	17 00
J. Gallagher	do	Morris	35 00
W. Craig	do	Osnabrock	44 00
Gillmor & Co.	do	Cashel	201 45
H. Y. Read	Refund timber dues		45 71
H. Easton	do		49 80
John Chaffey	do		102 38
W. Upton	do		14 64
J. Mann	do		55 96
A. McDonald & Co.	do		32 74
B. Talbot	do		66 74
M. McCauley	do		423 63
J. Adams	do		142 76
J. Tell	do		26 74
S. McDaniel	do		19 30
R. Lipsey	do		15 24
A. Acon	do		6 47
J. Hunter	do		5 40
J. McLachlin	do		24 50
J. Hunter	do		16 60
D. Skully	do		18 80
Hillier & Dixon	do		172 80
C. Miller	do		40 85
J. Parkins	do		4 18
C. C. Fyle	do		115 44
J. Hough	do		10 00
D. Greaser	do		102 93
N. Rutten	do		2 20
A. Campbell	do		220 10
J. Spence	do		36 10
N. Shields	do		26 20
Jas. Lavery	do		30 27
J. Sullivan	do		22 05
J. Dunlop	do		74 93
J. McManus	do		10 00
P. Nugent	do		68 02
D. Hurly	do		30 35
H. W. Sage & Co.	do		100 80
Jas. A. Buck	do		123 99
J. Jackson	do		71 44
F. Gallagher	do		50 00
Hotchkiss, Peckham & Co.	do		1,131 10
L. Maclean	do		28 29
D. Burke	do		9 61
D. McArthur	do		53 36
R. White	do		170 95
J. Gannon	do		65 92
Patterson & McRae	do		26 30
Carried forward.....			10,909 38
			28,163 07
			1,432,375 21

Crown Lands Expenditure.—Continued.

TO WHOM PAID.	SERVICE.	\$ cts.		
		\$	cts.	\$ cts.
	<i>Brought forward.....</i>	10,909	38	28,163 07
	<i>Refunds.—Continued.</i>			1,432,375 21
W. B. Robinson	Refund timber dues.....	38	80	
Robt. Campbell	do	31	24	
H. H. Cook	Refund Timber License	4	00	
H. Cardwell	do	4	00	
A. P. Cockburn	do	4	00	
F. Fisher	do	4	00	
J. McLeod	do	4	00	
J. Crane	do	4	00	
W. Fitzsimons	do	4	00	
A. Baker	do	4	00	
C. Miller	do	4	00	
J. Spence	do	4	00	
H. Wilson	do	4	00	
E. Botting	do	4	00	
R. McPeak	do	4	00	
T. Tryon	do	4	00	
S. Lynn	do	4	00	
W. J. Austin	do	4	00	
R. Barry	do	4	00	
J. Hopkins	do	4	00	
T. Snodden	do	4	00	
Jas. Hopkins	do	4	00	
J. McDonald	do	4	00	
Geo. Hughes	do	4	00	
J. Steele	do	4	00	
P. Phelan	do	4	00	
Stayner & Cooper	Refund ground rent.....	40	00	
W. J. Cooper	do	16	00	
E. T. Herring	do	10	00	
Jno. Rogers	Refund charges erroneously deposited	10	00	
Jas. F. Way	do	73	00	
Receiver-General, Canada	do	469	83	
Merrick, Towler & Esseltyn	Refund Timber trespass.....	376	03	
Jas. Hough	do	156	78	
Kyle & Brydges	do	47	44	
E. Gray	do	16	00	
P. McGregor	Law costs	7	00	

Inspecting	20 00	12,318 10	80,481 17	40,000 00	1,512,856 33
<i>Surveys.</i>					
Surveying Township of Muskoka and Wood					
do do McIntyre	1,829 45				
do do Spence	191 88				
do do Carling	750 00				
do do Croft	422 90				
do do McCure	2,175 00				
do do Farraday	2,151 35				
do do McMurrich	2,092 70				
do do	755 32				
do do Timber Berths, Spanish River	1,739 50				
do do Chaffey and Stisted	120 00				
do do West section, north of Lake Superior	5,000 00				
do do Michipicoten	2,623 86				
do do Mayo	108 89				
do do Hagerman	2,228 50				
do do Monteith	400 00				
do do McFavish	2,700 23				
do do Chapman	1,804 69				
do do East section, north of Lake Superior	4,706 95				
do do Michipicoten	1,320 00				
do do Timber Berths, River Arable	2,143 68				
do do Timber Limits	1,200 00				
do do McMurrich	500 00				
do do Timber Limits	400 00				
do do Ryerson	2,451 90				
do do Michipicoten	50 00				
do do Water Lot, Southampton	133 50				
Total Crown Land expenditure				40,000 00	
<i>Colonization Roads.</i>					
On account work on Muskoka Road					
do do Rosseau	25 00				
do do Hastings	7,009 06				
do do do	50 00				
do do do	1,984 50				
do do Mississippi	600 00				
do do Monck East	647 17				
do do do	5,591 16				
do do West	4,004 00				
do do Northern	2,870 00				
do do Junction	1,000 00				
do do Parry Sound	1,859 30				
do do Pembroke and Mattawan Road	4,600 00				
do do Addington	1,001 25				
do do Parry Sound	120 00				
Carried forward	31,941 41				
					1,512,856 33

C. J. Anderson	do	250 00	.....	.....	16,120 27
W. Bristow	do	100 00	.....	.....
Hon. J. H. Cameron	do	2,800 00	.....	.....
do	Travelling expenses	250 00	.....	.....
Hon. E. B. Wood	do	505 60	.....	.....
W. B. Canavan	do	25 00	.....	.....
Jno. Langton	do	55 00	.....	.....
Hunter, Rose & Co.	Printing	34 67	.....	.....
STATIONERY ACCOUNT.					
Buntin Bros	Sundries	1,165 57	.....	.....
Jas. Campbell & Son	do	816 99	.....	.....
Brown Bros	do	8 23	.....	.....
Cowan & Co.	do	3,225 05	.....	.....
Irden & Co.	do	7 00	.....	.....
A. F. Potter	do	341 35	.....	.....
Macpherson, Ross & Co.	Forwarding	6 35	.....	.....
Alex. Gordon	Duty, freight, &c.	96 11	.....	.....
Jno. Notman	do	421 87	.....	.....
Hunter, Rose & Co.	Printing	81 25	.....	.....
Less distribution to Departments		6,170 27	.....	.....	1,686 56
Total		4,433 71	.....	.....	1,580,063 21

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, 31st December, 1870.

No. 13.

STATEMENT shewing details of Contingencies referred to in the annexed Statement, for the year ended 31st December, 1870.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.
	<i>Lieutenant-Governor's Office.</i>				
Jos. Leslie.....	Postage.....	42	59		
Montreal Telegraph Company.....	Telegrams.....	55	66		
Hunter, Rose & Co.....	Printing.....			98	25
Jos. Bain.....	Books.....			8	26
Jno. Notman.....	Stationery.....	8	40		
		38	06		
J. Adams.....	Flag and fittings.....			46	46
Wm. Bailey.....	Cab hire.....	9	00	75	20
E. G. Curtis.....	Expenses to Ottawa.....	41	76		
do	do Belleville.....	10	55		
				61	26
Toronto Globe.....	Subscription and Advertising.....	12	20		
Toronto Telegraph.....	do.....	6	50		
Toronto Leader.....	do.....	4	68		
Montreal Gazette.....	do.....	20	65		
Montreal Herald.....	do.....	6	00		
Hamilton Spectator.....	do.....	5	00		
Hamilton Times.....	do.....	1	85		
Ottawa Citizen.....	do.....	8	00		
Canadian Freeman.....	do.....	7	50		
New York Albion.....	do.....	4	00		
				76	38
	<i>Executive Council Office.</i>				365 81
Jos. Leslie.....	Postage.....			65	53
Hunter, Rose & Co.....	Printing.....			31	15
Jno. Notman.....	Stationery.....			46	05
Metropolitan Water Co.....	Water.....				
Geo. Chaffey & Bro.....	Fuel.....	10	00		
T. C. Chisholm.....	do.....	58	40		
Wm. Myles.....	do.....	68	02		
Consumers' Gas Co.....	Gas.....	20	50		
Fulton, Michie & Co.....	Candles.....	32	59		
		6	20		

H. Piper	Oil, etc	11 45	207 10
Merrick Bros	Flannel	36	
Hv. Graham & Co	Carpetting	20 96	
McDunnough & James	do	0 67	
Jno. Kay	do	17 25	39 84
Jno. Boxall	Tinsmithing	3 75	
Thos. Lalor	Bell hanging, etc	3 65	
Rice Lewis & Son	Hardware	60	
D. Grant	Carpenter work	19 00	27 00
Montreal Witness	Subscription	3 05	
Toronto Leader	do	4 08	
Toronto Globe	do	5 20	12 93
H. Kinloch	Travelling expenses to attend Council meetings	79 30	
Angus McDouell	Expenses to Niagara	7 20	
Cabman	Cab hire	1 00	87 50
Express Co	Charges		25
Wm. Perry	Cartage		9 00
G. D. Boulton	Office rent		150 00
<i>Attorney-General's Office.</i>			
Jos. Leslie	Postage	141 42	359 07
Montreal Telegraph Co	Telegrams	217 65	25 89
Hunter, Rose & Co.	Printing	46 06	
Jno. Notman	Stationery	1 25	
H. Rowsell	do	307 00	354 31
J. Rodans	Law Reports, &c.		
Metropolitan Water Co.	Water	10 00	
J. Burns	Ice	9 75	
Wm. Myles	Fuel	20 50	
Geo. Chaffey & Bro.	do	58 40	
T. C. Chisholm	do	68 03	
Consumers' Gas Co.	Gas	21 30	
Fulton, Michie & Co.	Candles, &c.	12 75	
Glover Harrison	Oil and Lamps	12 00	212 73
Jno. Boxall	Tinsmithing	10 58	
Geo. Harding	Plumbing, &c.	15 58	
P. Paterson & Son	Hardware	39	26 55
J. G. Scott	To pay for Book-case	75 00	
H. Piper	Brushes	3 80	
<i>Carried forward</i>		78 80	978 55
			1,042 22

676 41

Contingencies.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward.....</i>	78	80	978	55	1,042	22
	<i>Attorney-General's Office.—Continued.</i>						
H. Graham & Co.....	Carpeting	20	96	99	76		
T. Bryan	Repairing clock	60					
B. Smith	Office cleaning	10	00				
J. Broxup	Chimney cleaning	1	20	11	80		
W. Berry	Cartage	9	00				
H. Phillips	do	2	70				
F. Middleton	Street watering	6	00	11	70		
Montreal Daily News	Subscription	7	50	3	00		
Morrisburg Courier	do	5	00				
Toronto Telegraph	do	4	00				
Montreal Gazette	do			22	50		
G. D. Boulton	Office Rent			150	00		
	<i>Treasury Department.</i>					1,277	31
Sundry persons	Postage stamps	575	59				
Montreal Telegraph Co.	Telegrams	305	19				
Hunter, Rose & Co.	Printing	407	68	680	78		
J. T. Rolph	Engraving bank cheques	75	50				
Jno. Notman	Stationery	126	21	483	18		
J. D. Linton	Almanacs	1	00				
R. S. Thompson	do	1	00				
H. J. Forbes	Books	10	00				
A. Piddington	Exchange tables	1	00				
W. Gibson	Calendar	1	50				
Robertson & Cook	Directory	1	50				
Toronto Globe	Subscription and advertising	10	00	142	24		
Toronto Leader	do	4	68				
Toronto Telegraph	do	5	00				
Hamilton Times	do	10	00				

Princeton Review.....	do	7 00			
A. Hudson	Newspapers, &c.....	32 67		69 35	
H. P. Brummell.....	Brushes	1 00			
Wm. Brydon	do	1 75			
Glover Hanison	Glassware	1 13			
R. Malcom	Letter case	9 00			
Merrick Bros.	Tovelling	6 38			
McDunnough & James.....	Mat	1 25			
John Boxall	Tin box	9 00			
Jordan & Co.	Crockery.....	1 32		30 83	
H. Robinson	Whitewashing.....	1 50			
W. J. Smith	Cleaning	1 00			
W. R. Harris	To pay protest R. C. B.			2 50	
Ontario Ice Co.	Ice	7 60		2 93	
Consumers' Gas Co.	Gas	9 00			
Express Co.	Charges			16 00	
P. Simser	Services as messenger.....	64 00		49 75	
Hon. John Simpson.....	Services re Public Accounts.....	200 00			
Sundry persons	Cab-hire	49 85		264 00	
Hon. E. B. Wood	Expenses to Ottawa	40 00			
	<i>Secretary and Registrar's Department.</i>			89 85	
Jos. Lesslie	Postage.....	255 38			
Montreal Telegraph Co.	Telegrams	78 29			
Hunter, Rose & Co.	Printing				
John Notman	Stationery	126 40			
J. W. Linton	Almanacs	50		333 67	
J. Bah.	do	1 00		609 74	
W. Gibson	Calendar.....	1 50			
John Young	Bible	42			
Chas. Robertson	Maps	15 00		144 88	
Toronto Telegraph	Subscription and advertising.....	14 00			
Toronto Globe	do	7 45			
Toronto Leader	do	6 93			
Morrisburg Courier	do	7 50			
Peterboro' Herald	Advertising	1 92		37 80	
T. Lalor	Altering Great Seal	11 00			
J. T. Rolph	Repairing Stamp	1 50		12 50	
Merrick Bros.	Tovelling	6 38			
	<i>Carried forward.....</i>			1,198 59	
					1,831 53

Contingencies.—Continued.

TO WHOM PAID.	SERVICE.	\$		\$	
		cts.		cts.	
	<i>Brought forward.....</i>	6 38		1,198 59	4,151 06
	<i>Secretary and Registrar's Department.—Continued.</i>				
Glover Harrison.....	Glassware.....	2 25			
Jacques & Hay.....	Chairs.....	13 50			
Ontario Ice Co.....	Ice.....	7 60			
J. R. Eckart.....	Fee—Osgood Hall.....	50		29 63	
Sundry persons.....	Cab-hire.....	7 50			
T. C. Patterson.....	Expenses to Ottawa.....	35 00		42 50	1,270 72
	<i>Public Works Department.</i>				
Jos. Lesslie.....	Postage.....	504 16			
Montreal Telegraph Co.....	Telegrams.....	295 67		799 83	
Hunter, Rose & Co.....	Printing.....	231 57			
J. Rordans.....	Engrossing.....	6 00		237 57	
John Notman.....	Stationery.....	240 89			
Comp. Clark & Co.....	Books.....	59 18			
R. P. Taylor.....	Daily Journal.....	65			
J. D. Linson.....	Almanacs.....	2 00			
Wm. Gibson.....	Calendar.....	1 50			
Robertson & Cook.....	Directory.....	1 50		305 72	
	Subscription.....	5 00			
London Prototype.....	do.....	4 25			
Toronto Advertiser.....	do.....	5 00			
Toronto Telegraph.....	do.....	5 20			
Toronto Globe.....	do.....	4 68			
Toronto Leader.....	do.....	5 00			
Montreal Gazette.....	do.....	5 00			
Ottawa Free Press.....	do.....	5 00			
Hamilton Spectator.....	do.....	5 00			
Morrisburgh Courier.....	do.....	7 50		46 63	
J. T. Rolph.....	Ribbon press, &c.....	27 50			
D. Forbes.....	Copying.....	1 50			
Hiram Piper.....	Furnishings.....	10 75			
R. C. Bothwell.....	Letter bag.....	3 15			

Glover Harrison	Glasgow	3 25	
Chas. Potter	Barometer	22 00	
Jno. Edwards	Pen-racks, &c.	3 30	
Merrick Bros	Towelling	6 38	
Wm. Edwards	Sundries	2 50	
J. Silmsen	Cleaning	3 50	
Sundry persons	Freight and express charges	83 83	
Ontario Ice Company	Ice	30 00	
Consumers' Gas Co.	Gas	7 00	
A. Smith, V.S.	Investigating cattle disease	15 90	
Sundry persons	Cab-hire	54 35	
Geo. Buckland	Expenses re Fruit Growers' Association	16 00	
do	Expenses attending Agt. meetings in Brant, Norfolk and Haldimand	18 50	
do	do do Northumberland, Hastings and Prince Edward	15 50	
F. T. Jones	Expenses to London and Ottawa	17 50	
do	do Ottawa, three trips	50 00	
do	do London, three trips	111 70	
Wm. Edwards	do Woodbridge	34 00	
R. L. Brydges	Services as extra Clerk	9 95	
		327 50	
		77 25	
			1,965 23
J. Morphy	Postages	400 00	
Jos. Leslie	P.O. box	1 50	
Montreal Telegraph Co.	Telegrams	82 09	
Hunter, Rose & Co.	Printing		483 59
Corp., Clark & Co.	Lithographing	1,273 74	
		35 00	
John Norman	Stationery		1,308 74
Robertson & Cook	Directories	1,084 48	
H. Rowsell	Binding, &c.	4 50	
R. H. Browne	Abstracts	17 90	
		4 65	
Northern Advocate	Advertising		1,111 53
Pembroke Observer	do	60 80	
Conwall Freeholder	do	4 00	
Orillia Northern Light	do	8 04	
Lindsay Expositor	do	4 08	
Arnprior Times	do	4 00	
Brockville Recorder	do	10 25	
Bruce Herald	do	10 20	
Brantford Courier	do	3 50	
Port Hope Mercury	do	62 20	
Peterboro' Review	do	67 84	
	do	67 42	
	Carried forward		2,903 86
		302 33	7,387 01

Contingencies.—Continued.

TO WHOM PAID.	SERVICE.	\$ cts.		
		\$	cts.	\$
	<i>Brought forward.....</i>	302	33	7,387 01
	<i>Crown Lands Department.—Continued.</i>			
	Advertising.....	86	32	
	Niagara Mail.....	16	50	
	Brockville Monitor.....	6	68	
	Victoria Warrier.....	12	04	
	Canadian Times.....	9	28	
	British Canadian.....	9	28	
	Toronto Telegraph.....	32	75	
	Toronto Globe.....	18	10	
	Toronto Leader.....	28	75	
	Morning Chronicle.....	5	40	
	British Whig.....	7	20	
	St. Catharines Journal.....	6	40	
	Stratford Beacon.....	4	80	
	Hamilton Spectator.....	10	80	
	Pictou Times.....	11	00	
	Carleton Place Herald.....	5	00	
	Montreal Herald.....	8	67	
	Windsor Record.....	3	36	
	Grand River Sentinel.....	19	80	
	Renfrew Union.....	6	00	
	Montreal Herald.....	4	10	614 56
	Toronto Leader.....	4	68	
	Toronto Telegraph.....	5	00	
	Geo. Chaffey & Bro.....	72	84	
	T. C. Chisholm.....	425	14	9 68
	Metropolitan Water Co.....	115	00	
	Ontario Ice Co.....	15	00	
	Jno. Boxall.....	112	33	627 98
	W. Brown.....	5	30	
	D. Grant.....	22	00	
	P. Paterson & Son.....	17	36	
	Geo. Harding.....	96	89	
	Robt. Bell.....	19	20	
	A. McCormack.....	1	50	

Contingencies.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>					13,541	76
	<i>Legislation.</i>						
Montreal Telegraph Co.....	Telegrams						
Hunter, Rose & Co.....	Printing and Binding		270	04	20	90	
W. J. Owen.....	Engraving		5	00	225	04	
Adam, Stevenson & Co.....	Books, etc	87	85				
Robertson & Cook.....	Drectories	4	50				
Kingston Whig.....	Advertising	64	96	92	35		
Brantford Courier.....	do	54	10				
Owen Sound Comet.....	do	37	08				
Toronto Telegraph.....	do	10	00				
Canadian Freeman.....	do	47	80				
Brockville Recorder.....	do	35	50				
Kingston News.....	do	59	29				
Toronto Globe.....	do	72	88				
Toronto Leader.....	do	75	70				
W. Kirby.....	do	7	00				
C. T. Gillmor.....	Subscription—sundry newspapers			464	31		
Ontario Ice Company.....	Ice.....			307	90		
T. Lalor.....	Locksmithing	18	50	27	00		
Jno. Boxall.....	Stove cleaning, etc	56	05				
Rice Lewis & Son.....	Hardware	32	75				
Jacques & Hay.....	Furniture	16	60				
				153	90		
Pattison & Co.....	Glassware	10	85				
H. Piper & Co.....	Tinware	1	50				
Hudson's Bay Co.....	Lamps	16	10				
J. G. Joseph & Co.....	Thermometer	21	10				
J. T. Rolph.....	Repairing stamp, etc	12	00				
Jas. E. Ellis.....	do clocks	4	00				
C. Thompson.....	Soap, brooms, etc	54	66				
R. Malcolm.....	Canvas bag	5	25				
W. Arthurs.....	Dry goods	15	45				
Hughes & Co.....	Gown, etc, for assistant clerk	45	00				
				185	91		
Grand Trunk Railway Co.....	Freight		10	66			

Express Co.....	Charges.....	46 02			
Sundry persons.....	Cartage.....	3 75			
do.....				60 43	
A. Leith.....	Cab hire.....	25 50			
	Travelling expenses.....	9 00			
Thos. Phillips.....	Cleaning.....			34 50	
H. Gorman.....	Services as extra clerk.....			237 33	
D. Kannon.....	Services as Fireman.....	32 00			
		38 00			
W. N. Alger.....	Escort for His Excellency the Lieutenant-Governor at opening of House.....			70 00	
				39 50	
					1,919 07
<i>Education Office.</i>					
Jos. Lesslie.....	Postage.....	699 46			
Sundry persons.....	Postage stamps.....	125 29			
Hunter, Rose & Co.....	Printing.....			24 75	
Jno. Notman.....	Stationery.....			364 79	
Brown Bros.....	do.....	650 28			
H. Rowsell.....	Law reports, etc.....	72 00			
Sundry persons.....	Pamphlets, etc.....	13 54			
Adam Miller.....	Pens.....	7 71			
		4 56			
				748 09	
St. Toronto Leader.....	Subscription.....	9 36			
Toronto Telegraph.....	do.....	5 00			
Toronto Globe.....	do.....	10 40			
Montreal Gazette.....	do.....	3 00			
Hodgins, Bull & McWilliams.....	Law costs.....			27 76	
A. Diamond.....	do.....	79 56			
		42 26			
Rev. Dr. Ormiston.....	Expenses attending Council of Public Instruction.....			121 82	
Geo. Chaffey & Bros.....	Fuel.....	350 00			
Water Co.....	Water.....	100 00			
Jno. Rogers.....	Carpenter work.....			450 00	
H. M. Wilkinson.....	To pay Sweeping chimnies.....			16 00	
				4 77	
					2,582 98
<i>Normal and Model Schools.</i>					
J. H. Sangster.....	Post office drawer.....			6 00	
Hunter, Rose & Co.....	Printing.....			183 19	
Jno. Notman.....	Stationery, etc.....	600 00			
S. P. May.....	do.....	1,916 54			
				2,516 54	
					18,043 81
	Carried forward.....			2,715 73	

Contingencies.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
Toronto <i>Globe</i>	<i>Brought forward</i>						
Toronto <i>Telegraph</i>	<i>Normal and Model Schools</i> .—Continued.						
Metropolitan Water Co	Advertising		5 85				
Geo. Chaffey & Bros	do		4 80				
T. C. Chisholm	Water		300 00				
Alex. Hamilton	Fuel		418 48		10 65		
Geo. Harding	do		229 50				
P. Faerson & Son	Painting		814 24				
Sparrow & Whatnough	Plumbing, etc		433 21				
N. L. Piper & Son	Hardware		14 93				
Geo. B. Smith	do		103 73				
D. Grant	Stove pipe		10 80				
Jno. Rogers	Lumber		37 31				
H. M. Wilkinson	Carpenter work		46 00				
Chas. Potter	do		147 01				
P. M. Morphy	Repairs, etc		8 40				
Jas. Ferrier	Repairing air-pump		25 10				
D. Williams	do clock		5 00				
P. Latham	do tools		3 82				
R. A. Wood & Bro	Mason work		12 50				
W. H. Sparrow	Pay lists of men employed gravelling walks		380 90				
Jas. Forsyth	Bricklaying		77 50				
J. R. Armstrong & Co	Chemicals		109 70				
Clevedon & Coombs	Sundries		26 98				
J. Fleming & Co	do		31 67				
Jno. Murphy	Coal hod		2 50				
Canlkins & Sanderson	Crockeryware		16 84				
Hy. Graham & Co	Mowing machine		45 00				
McDunnough & James	Cleaning rifles		21 00				
R. S. Williams & Co	Brooms, etc		36 00				
Robt. Rennie	Mats		18 50				
J. Forsyth	Carpetting		28 24				
W. Dawson	Piano hire		5 00				
	Clearing snow		40 00				
	Manning grounds		62 40				
	Cartage ..		19 10				
					2,120 45		462 93
							18,043 81

Rev. Dr. Ormiston.....	Examining pupils	50 00	6,307 74
<i>Depository.</i>			
Hunter, Rose & Co	Printing	752 49	
Jno. Notman	Stationery	600 00	
H. M. Wilkinson	Express charges, &c.	55 78	
Jno. Rogers	Lumber	9 00	
<i>Court of Chancery.</i>			
Jos. Lesslie	Postage	57 11	
Montreal Telegraph Co.....	Telegrams	5 00	
Hunter, Rose & Co.....	Printing	280 73	62 11
Jno. Notman	Stationery	21 25	214 67
Henry Rowsell.....	do		
Jacques & Hay	Furniture	35 86	301 98
D. Sutherland	Cleaning, repairs, &c	29 74	
J. E. Ellis.....	Repairing clocks	10 00	
J. T. Rolph	Ribbon presses, &c		75 60
A. Grant.....	Allowance to Judge's Library for the year 1870.....		65 00
A. N. Bnell	To pay extra clerk.....	20 00	100 00
J. P. Whitney.....	Ten months' salary as extra clerk, at \$2.00 per diem	608 00	
<i>Court of Queen's Bench.</i>			
Jos. Lesslie	Postage		118 59
Hunter, Rose & Co.....	Printing		73 61
Jno. Notman	Stationery		105 92
Jas. E. Linton.....	Hardware	18 88	
John Boxall.....	Cowls to chimnies	19 90	
Withrow & Hillock	Carpenter work	55 03	73 81
Jacques & Hay	Hanging curtains.....	41 50	
J. T. Rolph	Stamp ribbon.....	3 75	
J. Melander.....	Repairing clock.....	1 50	
R. Malcom	Letter bag	5 00	
Fulton & Michie.....	Candles	3 60	
J. Finch.....	Sundries	15 25	70 60
Sundry persons	Cleaning windows	15 55	
Do	Clearing snow	7 85	
Jas. Alexander	Cleaning	79 06	
R. G. Dalton	Allowance to Judge's Library for the year 1870.....		102 46
<i>Carried forward.....</i>			
			100 00
			644 99
			27,861 17

Contingencies.—*Concluded.*

TO WHOM PAID.	S E R V I C E.	\$ cts.	\$ cts.	\$ cts.
	<i>Brought forward.....</i>			27,861 17
Jos. Lesslie	<i>Court of Common Pleas.</i>			
Hunter, Rose & Co.....	Postages	54 58		
M. B. Jackson.....	Printing	9 08		
	Allowance to Judges Library, for the year 1870	100 00		
				163 66
				28,024 83

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, 31st December, 1870.

No. 14.

STATEMENT of expenditure for Carpenter work, Tinsmithing, Plumbing, &c., at East Wing, Parliament Buildings, for 1870.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.
D. Grant	Carpenter work	166	00		
D. Williams	do	6	00		
J. B. Smith	Lumber	33	30		
Jno. Boxall	Tinsmithing	31	25		
Geo. Harding	Plumbing	32	47		
P. Lalor	Locksmithing	6	20		
R. Bell	Painting and Glazing	24	50		
H. Piper	Furnishings	73	68		
R. Jordon & Co.	Soap, brooms, &c.	18	99		
P. Paterson & Son.	Hardware	37	92		
A. McCormick	Brick work	51	50		
D. Williams	Mason work	16	20		
Hugh Miller	White lead, paints, &c.	19	70		
Wm. Myles	Fuel	4	50		
Geo. Chaffey & Bros.	do	110	35		
T. C. Chisholm	do	283	90		
Consumers Gas Co.	Gas	17	88		
Metropolitan Water Co.	Water	115	00		
A. Morrison	to pay Street watering	25	00		
T. W. Smallwood	Wood-saw	1	25		
D. Kennedy	Ladders	6	27		
P. O'Brien	Cleaning, &c.	13	40		
S. Later	do	5	00		
W. Anderson	White washing	12	00		
L. Glynn	Clearing snow	20	00		
W. Law	do	9	90		
J. Hudson	Chimney sweeping	4	40		
A. McDonell	Towels	1	45		
J. E. Ellis	Repairing clock	1	25		
H. Graham & Co.	Carpetting	10	57		
J. Wickson	Repairs	3	25		
Toronto Globe	Advertising	3	25		
Do Leader	do				
	Carried forward	1,166	73		

STATEMENT of expenditure for Carpenter work, Tinsmithing, Plumbing, &c.—*Concluded.*

35 Victoria.

Sessional Papers (No. 2).

A. 1871

TO WHOM PAID.	SERVICE.	\$ cts.	\$ cts.
Toronto <i>Telegraph</i> A. McDonald Jno. Silmser.....	<i>Brought forward</i> Advertising do Twelve months' salary as Housekeeper to 31st December, 1870 do Fireman	1,166 73 3 50 600 00 305 00	2,135 23
Chargeable as follows :—	Treasury Department Secretary and Registrar's Department Public Works Department	711 74 711 74 711 75	2,135 23

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, 31st December, 1870.

No. 15.

THE ASYLUM FOR THE INSANE, Toronto, in account with the Province of Ontario, for the year ended 31st December, 1870.

Dr.	\$ cts.	Cr.	\$ cts.	\$ cts.
To Warrants issued during the year.....	70,818 73	By deposited to the credit of the Treasurer.....	14,413 12	14,413 12
To receipts for the year.....	14,413 12	By expenditure during the year, viz.:-		
		Advertising, printing and stationery	347 11	
		Beer, wine and spirits	2,776 30	
		Butchers' meat	3,452 14	
		Butter and cheese	3,430 21	
		Barley, rice, peas, &c.	614 13	
		Brushes, brooms, mops, &c.	437 20	
		Bedding, clothing and shoes.....	3,587 51	
		Bathbrick, blacklead, &c.....	14 90	
		Coffee and tea	2,845 27	
		Crockery and glassware	30 00	
		Clergy cab hire	63 00	
		Eggs, fish and fowl.....	501 64	
		Flour	5,306 50	
		Fruit and vegetables	81 12	
		Fuel	11,804 29	
		Furniture	679 33	
		Feed and fodder	25 00	
		Farm	1,415 85	
		Furnaces and engine house.....	1,157 94	
		Freight	63 45	
		Gas, oil, candles and matches.....	1,946 58	
		Interments	112 00	
		Improvements and amusements.....	176 74	
		Incidentals	45 85	
		Ice	60 00	
		Laundry and soap	795 90	
		Law expenses	45 25	
		Library	26 50	
		Medicines	306 30	
		Officers' travelling expenses.....	10 85	
		Postage, telegrams and express charges.....	105 79	
		Repairs	1,408 57	
Carried forward.....	85,231 87	Carried forward.....	49,673 22	14,413 12

THE ASYLUM FOR THE INSANE, Toronto, in account with the Province of Ontario, &c.—*Concluded.*

Dr.	\$ cts.	Cr.	\$ cts.	\$ cts.
<i>Brought forward</i>	\$5,231 87	<i>Brought forward</i>	49,673 22	14,413 12
		Salt, pepper, mustard, &c	152 12	
		Sugar and syrup	9,245 49	
		Straw	156 27	
		Smokehouse	44 67	
		Tobacco and pipes	331 85	
		Tools	9 49	
		Salaries and Wages, as follows, viz.:—		52,613 11
		Medical Superintendent	2,000 00	
		Bursar	1,200 00	
		Medical Assistant	1,000 00	
		Clinical do	300 00	
		Architect	400 00	
		Steward	600 00	
		Matron	300 00	
		Engineer	740 00	
		Keepers, guards, &c	11,665 64	
Total.....	\$5,231 87	Total.....		18,205 64
				85,231 87

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, 31st December, 1870.

No. 16.

THE MALDEN LUNATIC ASYLUM in account with the Province of Ontario, for the year ended 31st December, 1870.

Dr.	\$ cts.	Cr.	\$ cts.	\$ cts.
To Warrants issued during the year	24,852 68	By deposited to the credit of the Treasurer		957 10
To receipts for the year	957 10	By expenditure during the year, viz. :--		
		Butter and cheese	1,077 47	
		Barley and rice	89 90	
		Bedding, clothing and shoes	3,146 78	
		Beer, wine and spirits	637 13	
		Coffee and tea	747 32	
		Crockery and glassware	97 12	
		Eggs and fish	520 08	
		Elephants	1 50	
		Fruit	240 80	
		Feed and Fodder	469 76	
		Farm	878 86	
		Furniture	374 04	
		Flour, meal and hops	1,972 94	
		Fuel	383 90	
		Freight and express charges	280 97	
		Instruction and amusement	833 20	
		Interments	121 00	
		Incidentals	167 25	
		Ice	44 75	
		Light	124 05	
		Laundry	60 81	
		Medical fees	100 00	
		Medicine	67 13	
		Molasses and syrup	29 24	
		Meat	2,604 20	
		Officers travelling expenses	52 00	
		Ornamenting grounds	40 00	
		Printing and stationery	50 25	
		Postage and telegrams	95 78	
		Pepper, salt, mustard, &c.	130 86	
		Repairs, &c.	443 63	
		Removal of patients	110 27	
Carried forward.....	25,809 78	Carried forward.....	15,982 99	957 10

THE MALDEN LUNATIC ASYLUM in account with the Province of Ontario, for the year ended 31st December, 1870.—*Concluded.*

Dr.	\$ cts.	Cr.	\$ cts.	\$ cts.
<i>Brought forward</i>	25,809 78	<i>Brought forward</i>	15,982 99	957 10
		Straw	161 76	
		Soap, scrubbing and cleaning	225 15	
		Sugar	756 76	
		Tobacco and pipes	115 10	
		Salaries and wages as follows :—		17,241 76
		Medical Superintendent	1,400 00	
		Book-keeper	450 00	
		Steward	300 00	
		Keepers, guards, &c.	5,400 92	
Total.....	25,809 78	Total.....	.....	7,610 92
				25,809 78

N.B.—This Institution closed on the 20th November, when \$4,612.32 of the appropriation lapsed.

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

THE ORILLIA LUNATIC ASYLUM, in account with the Province of Ontario, for the year ended 31st December, 1870.

Dr.	Cr.	\$	cts.	\$	cts.
To warrants issued during the year		15,416	55		
To receipts for the year		1,761	43		
				1,761	43
	By deposited to the credit of the Treasurer				
	By expenditure during the year, as follows:—				
	Advertising, printing and stationery		29		62
	Barley, rice, peas and beans		100		90
	Beer, wine and spirits		588		60
	Butter		880		85
	Clothing, bedding and shoes		1,827		00
	Crockery and glassware		30		87
	Coffee and tea		608		96
	Flour, meal, &c.		1,270		87
	Farm and stable		117		34
	Fish and eggs		93		65
	Feed and fodder		297		90
	Freight, &c		101		22
	Fuel		810		00
	Fruit		32		59
	Gas, oil and candles		78		96
	Incidentals		91		77
	Interments		30		00
	Live stock		25		00
	Laundry		60		52
	Meat		2,084		47
	Medicines		45		86
	Officers' travelling expenses		17		75
	Poultry		4		88
	Rent and taxes		42		30
	Removal of patients		39		50
	Repairs		299		32
	Steam pump		32		15
	Sugar and syrup		746		57
	Serubbing and cleaning		68		06
	Salt, pepper, mustard, &c.		25		23
	Tools, &c		27		22
	Tobacco		82		58
	Vegetables		139		04
				10,761	55
Carried forward.....	Carried forward.....	17,177	98		
				12,522	98

THE ORILLIA LUNATIC ASYLUM, in account with the Province of Ontario, &c.—*Concluded.*

Dr.	§ cts.	Ca.	§ cts.	§ cts.
<i>Brought forward</i>	17,177 98	<i>Brought forward</i>.....	.....	12,522 98
		Salaries and wages, as follows :—		
		Medical Superintendent	1,400 00	
		Clerk	300 00	
		Steward	360 00	
		Matron	160 00	
		Engineer	600 00	
		Keepers, guards, &c	1,835 00	4,635 00
Total	17,177 98			17,177 98

N.B. - This Institution was closed on the 20th November, when \$1,609.45 of the appropriation lapsed.

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, 31st December, 1870.

THE INSTITUTION FOR DEAF AND DUMB, Belleville, in account with the Province of Ontario, for the year ended 31st December, 1870.

Dr.	\$ cts.	Cr.	\$ cts.	\$ cts.
To warrants issued during the year	5,219 03			
To receipts for the year	454 00			454 00
		By deposited to the credit of the Treasurer		
		By expenditure during the year as follows:—		
		Advertising and Printing.....	133 38	
		Butter	78 98	
		Barley, rice, peas, &c.	14 40	
		Bedding, clothing and shoes	54 25	
		Brushes, brooms, &c.	8 95	
		Bath brick, black lead, &c.	1 90	
		Cheese	7 16	
		Coffee and tea.....	80 48	
		Crockery and glassware	39 35	
		Flour	60 28	
		Fruit	31 00	
		Fish, fowl and eggs	25 73	
		Fuel	554 88	
		Furniture	387 75	
		Feed and fodder	46 79	
		Farm	789 73	
		Freight	136 37	
		Gas, oil, candles, &c.	24 67	
		Incidentals	421 03	
		Laundry	67 75	
		Library	62 50	
		Medicines	8 13	
		Meat	133 34	
		Officers travelling expenses	477 93	
		Telegrams and express charges	16 80	
		Salt, pepper, mustard, &c. . .	33 20	
		Sugar and syrup	81 72	
		Stationery	38 59	
		Vegetables	54 90	
		Salaries and wages from 15th October to 31st December, 1870, as follows:—		
		Principal, at \$1,600.00 per annum.....	333 32	
		Teacher, do	165 65	
		Carried forward.....	499 97	
	5,673 03			4,346 04
		Carried forward.....		3,892 04

The Institution for Deaf and Dumb, Belleville, in account with the Province of Ontario, &c.—*Concluded.*

Dr.	\$ cts.	Cu.	\$ cts.	\$ cts.
<i>Brought forward</i>	5,673 03	<i>Brought forward</i>	499 97	4,316 04
		Salaries and wages from 15th October to 31st December, 1870, as follows:—		
		Teacher, \$800.00 per annum	166 65	
		do 500.00 do	104 15	
		do 300.00 do	62 50	
		Matron, 300.00 do	53 33	
		Engineer, 600.00 do	100 00	
		Steward, salary from 15th September to 31st December, 1870, at \$800 per annum	212 48	
		Servants.....	122 91	
Total	5,673 03	Total	1,326 99	5,673 03

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, 31st December, 1870.

No. 19.

THE ASYLUM FOR INSANE, London, in account with the Province of Ontario, for the year ended 31st December, 1870.

Dr.	\$	cts.	Cr.	\$	cts.
To warrants issued during the year	19,145	43			
			By expenditure during the year, as follows:—		
			Advertising	32	00
			Beer, wine and spirits	371	98
			Butter and cheese	360	96
			Barley, rice, &c.	32	75
			Bedding and clothing.....	1,350	99
			Eggs and fish	23	36
			Fruit	159	18
			Fuel	5,507	68
			Freight and express charges.....	570	52
			Farm	290	00
			Farm stock	769	46
			Farm implements	891	70
			Feed and fodder	605	48
			Furniture	407	48
			Incidentals	236	18
			Medical attendance	12	00
			Meat, flour, &c.....	2,035	95
			Mustard, vinegar, &c.	72	92
			Removal of patients	2,446	50
			Scrubbing and cleaning.....	457	35
			Sugar	282	88
			Stationery and postage.....	71	35
			Tea and coffee.....	221	30
			Salaries and wages for December, 1870, as follows:—		
			Medical Superintendent, at \$1,400 per annum	116	66
			Assistant Physician, at \$800	66	66
			Book-keeper, at \$450	37	50
			Steward, at \$300	25	00
			Engineer, at \$740	61	66
			Keepers, guards, &c.....	1,627	98
Total.....	19,145	43	Total.....		
				17,209	97
				1,935	46
				19,145	43

N.B.—The above account is, 1st, for the maintenance of working patients removed from Malden to London Asylum before the occupation of the last-named institution; 2nd, for the entire maintenance of the Malden and Orillia patients from the 20th November to 31st December; 3rd, for placing London Asylum in order for the reception of patients; and 4th, for all expenses incurred in the removal of the patients and asylum effects from Malden and Orillia to London.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, 31st December, 1870.

E. B. WOOD,
Treasurer.

No. 20.

THE REFORMATORY PRISON, in account with the Province of Ontario, for the year ended 31st December, 1870.

Dr.	\$	cts.	Cr.	\$	cts.
To warrants issued during the year.....	22,473	36			
To receipts for the year.....	1,786	40			
			By deposited to the credit of the Treasurer.....		
			By expenditure during the year, as follows:—		
			Blacksmith shop.....	55	87
			Bedding.....	200	29
			Chapel and school.....	636	74
			Cooper shop.....	44	91
			Convicts' travelling expenses.....	359	00
			Clothing.....	2,910	19
			Eloplements.....	60	02
			Furniture.....	427	19
			Freight.....	467	81
			Farm.....	1,093	64
			Hospital.....	134	60
			Light.....	136	98
			Maintenance of building.....	625	73
			New construction.....	1,264	94
			Officers' travelling expenses.....	105	64
			Rent.....	72	00
			Stationery and postage.....	102	06
			Stable.....	55	73
			Soap.....	90	35
			Shoe shop.....	1	67
			Tailor shop.....	25	35
			Tinsmith shop.....	64	65
			Tools.....	145	68
			Wharf and boat.....	42	21
			Victualling.....	4,138	41
			Salaries and wages, as follows:—		
			Warden.....	1,600	00
			Deputy Warden.....	720	00
			Two Chaplains.....	1,600	00
			Surgeon.....	400	00
			Steward.....	400	00
			Keepers, guards, &c.....	4,491	70
Total.....	24,259	76	Total.....	24,259	76

TREASURY DEPARTMENT, ONTARIO,
TORONTO, 31st December, 1870.E. B. WOOD,
Treasurer.

No. 21.

STATEMENT of the Municipalities' Fund, 18th Vic., Cap. 2, and 19th Vic., Cap. 16, from 31st Dec., 1869, to 31st Dec., 1870.

PAYMENTS.	\$ cts.	RECEIPTS.	\$ cts.
To amount paid to the different Municipalities on account of distribution for twelve months ending 31st December, 1869, at the rate of 30 cents per head.....		By balance from 1869	81,647 25
To proportion of fund due to Townships in Lanark and Renfrew....	73,332 00	By gross receipts of Crown Lands Department for the twelve months ending 31st December, 1870	88,634 25
Do do do Perth	3,001 50		
Do do do City of Hamilton	2,139 70		
To expenses of management on receipts, December 31st, 1870	1,830 10		
To refunds of 1869 and 1870	17,268 85		
Balance	723 72		170,281 50
	71,975 63	By balance available for distribution in 1871.....	71,975 63
	* 170,281 50		

E. B. WOOD,
*Treasurer.*TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

No. 22.

STATEMENT of payments made from Municipalities' Fund, 18th Vic., Cap. 2 and 19, Cap. 16, being distribution for 1869.

MUNICIPALITY.	COUNTY.	Rate-payers.	Amount. \$ cts.
Alfred	Prescott	307	92 10
Augusta	Grenville	911	273 30
Aurora	York	241	72 30
Adelaide	Middlesex	574	172 20
Ancaster	Wentworth	816	244 80
Albion	Peel	1,009	302 70
Arran	Bruce	600	180 00
Aldborough	Elgin	658	197 40
Ashfield	Huron	650	195 00
Anderdon	Essex	363	108 90
Alnwick	Northumberland	192	57 60
Arthur	Wellington	699	209 70
Asphodel	Peterborough	513	153 90
Albemarle	Bruce	56	16 80
Amabel	Bruce	242	72 60
Athol	Prince Edward	330	99 00
Amherstburg Town	Essex	482	144 60
Amherst Island	Addington	200	60 00
Amaranth	Wellington	444	133 20
Ameliasburgh	Prince Edward	721	216 30
Adjala	Simcoe	510	153 00
Artemesia	Grey	676	202 80
Adolphustown	Lennox	146	43 80
Ashburnham	Peterborough	174	52 20
Bexley	Victoria	94	28 20
Brampton	Peel	424	127 20
Bertie	Welland	555	166 50
Barrie Town	Simcoe	754	226 20
Bath Village	Lennox and Addington	121	36 30
Brant	Bruce	929	278 70
Berlin Town	Waterloo	477	143 10
Bosanquet	Lambton	690	207 00
Bedford and Palmerston	Frontenac	348	104 40
Belleville Town	Hastings	1,574	472 20
Brighton Village	Northumberland	230	69 00
Bimbrook	Wentworth	344	103 20
Bentnick	Grey	950	285 00
Brook	Ontario	782	234 60
Bastard and Burgess	Leeds	800	240 00
Bruce	Bruce	631	189 30
Biddulph	Middlesex	752	225 60
Blenheim	Oxford	1,079	323 70
Barton	Wentworth	522	156 60
Brantford	Brant	1,168	350 40
Bowmanville Town	Durham	1,038	311 40
Blandford	Oxford	300	90 00
Bayham	Elgin	945	283 50
Beverly	Wentworth	1,108	332 40
Bothwell Town	Kent	160	48 00
Bradford Village	Simcoe	237	71 10
Burleigh, Anstruther, Chandos and Cardiff	Peterborough	110	33 00
Belmont	Peterborough	243	72 50
Brooke	Lambton	468	140 40
Burford	Brant	1,028	308 40
Brighton	Northumberland	643	192 90
Barrie	Frontenac	102	30 60
Cambridge	Russell	116	34 80
Carried forward.....			9,370 80

STATEMENT of payments made from Municipalities' Fund, &c.—*Continued.*

MUNICIPALITY.	COUNTY.	Rate-payers.	Amount.
			\$ cts.
<i>Brought forward</i>			9,370 80
Crosby North	Leeds	378	113 40
Clifton Town	Welland	352	105 60
Camden East	Addington	1,100	330 00
Clarke	Durham	982	294 60
Cayuga North	Haldimand	383	114 90
Cayuga South	Haldimand	166	49 80
Chinguacousy	Peel	1,075	322 50
Cornwall	Stormont	725	217 50
Caradoc	Middlesex	737	221 10
Camden and Dalton	Victoria	187	56 10
Clinton	Lincoln	510	153 00
Crosby South	Leeds	383	114 90
Cumberland	Russell	467	140 10
Colborne	Huron	392	117 60
Clinton Village	Huron	413	123 90
Crowland	Welland	295	88 50
Caledonia	Prescott	197	59 10
Collingwood Town	Simcoe	343	102 90
Caledonia Village	Haldimand	264	79 20
Caledon	Frontenac	73	21 90
Collingwood	Grey	577	173 10
Caledon	Peel	841	252 30
Caistor	Lincoln	373	111 90
Clarence	Russell	376	112 80
Chatham and North Gore	Kent	938	281 40
Carrick	Bruce	750	225 00
Charlottetown	Norfolk	775	232 50
Charlottenburg	Glengarry	1,026	307 80
Camden	Kent	650	195 00
Cayuga Village	Haldimand	157	47 10
Canborough	Haldimand	253	75 90
Cavan	Durham	970	291 00
Cornwall Town	Stormont	373	111 90
Colborne Village	Northumberland	164	49 20
Colchester	Essex	536	160 80
Cartwright	Durham	507	152 10
Culross	Bruce	627	188 10
Cramahe	Northumberland	671	201 30
Denbigh, Abinger and Ashby	Addington	74	22 20
Dorchester South	Elgin	502	150 60
Dumfries North	Waterloo	699	209 70
Dunville Village	Haldimand	353	99 90
Douro	Victoria	442	132 60
Draper, Macaulay, Ryde, Stephenson and Oakley	Victoria	262	78 60
Dunn	Haldimand	212	63 60
Delaware	Middlesex	305	91 50
Dummer	Peterborough	320	96 00
Derby	Grey	360	108 00
Dumfries South	Brant	486	145 80
Dover	Kent	545	163 50
Dorchester North	Middlesex	683	204 90
Darlington	Durham	1,120	336 00
Dawn	Lambton	206	61 80
Dunwich	Elgin	726	217 80
Dysart, Guildford, Dudley, Harburn, Harcourt and Briton	Peterborough	112	33 60
Dereham	Oxford	870	261 00
Ernesttown	Addington	1,019	305 70
Edwardsburgh	Grenville	892	267 60
Elora Village	Wellington	325	97 50
<i>Carried forward</i>			18,514 50

STATEMENT of payments made from Municipalities' Fund, &c.—*Continued.*

MUNICIPALITY.	COUNTY.	Rate-payers.	Amount.
			<div>\$</div> <div>cts.</div>
<i>Brought forward.....</i>			18,514 50
Ekfrid	Middlesex	608	182 40
Euphrasia	Grey	488	146 40
Euphemia	Lambton	463	138 90
Eramosa	Wellington	596	178 80
Escott Front of	Leeds	227	68 10
Ennismore	Peterborough	176	52 80
Eldon	Victoria	534	160 20
Embro	Oxford	119	35 70
Enniskillen	Lambton	261	78 20
Essa	Simcoe	650	195 00
Elmsley South.....	Leeds	240	72 60
Esquesing	Halton	1,010	303 00
Etobicoke	York	542	162 60
Erin	Wellington	823	246 90
Emily	Victoria	625	187 50
Elderslie	Bruce	679	203 70
Elzevir	Hastings	232	69 60
Egremont	Grey	716	214 80
Fredericksburgh North.....	Lennox	360	108 00
Fort Erie Village	Welland	162	48 60
Fitzroy	Carleton	508	152 40
Finch	Stormont	484	145 20
Flamborough West	Wentworth	691	207 30
Fredericksburgh South	Lennox and Addington.....	325	97 50
Fenelon	Victoria	601	180 30
Fergus Village.....	Wellington	232	69 60
Flamborough East	Wentworth	713	213 90
Flos	Simcoe	292	87 60
Guelph	Wellington	477	143 10
Georgina	York	274	82 20
Grey	Huron	693	207 90
Gananoque Village.....	Leeds	378	113 40
Gainsborough	Lincoln	537	161 10
Grantham	Lincoln	683	204 90
Gower South	Grenville	168	50 40
Garafraxa West	Wellington	536	160 80
Galt Town	Waterloo	842	252 60
Glenelg	Grey	759	227 70
Goderich	Huron	610	183 00
Greenock	Bruce	544	163 20
Grimsby.....	Lincoln	548	164 40
Gloucester.....	Carleton	838	251 40
Gwillinsbury North	York	335	100 50
Gwillinsbury East	York	725	217 50
Glandford	Wentworth	404	121 20
Gosfield	Essex	556	166 80
Garafraxa	Wellington	470	141 00
Gwillinsbury West	Simcoe	580	174 00
Garden Island Village	Frontenac	120	36 00
Georgetown	Halton	188	56 40
Galway and Cavendish.....	Peterborough	112	33 60
Goulbourne	Carleton	477	143 10
Gower North	Carleton	398	119 40
Hinchinbrooke.....	Frontenac	143	42 60
Hope	Durham	964	289 20
Hillier	Prince Edward	504	151 20
Hullett	Huron	559	167 70
Hawkesbury West.....	Prescott.....	333	99 90
Holland	Grey	595	178 50
Huntley.....	Carleton	418	125 40
Huntingdon	Hastings	525	157 50
<i>Carried forward.....</i>			27,409 50

STATEMENT of payments made from Municipalities' Fund, &c.—*Continued.*

MUNICIPALITY.	COUNTY.	Rate-payers.	Amount.
			\$ cts.
<i>Brought forward</i>			27,409 50.
Hamilton	Northumberland.....	1,061	318 30
Haldimand	Northumberland.....	1,012	303 60
Howard	Kent	890	258 00
Hay	Huron	572	171 60
Howick	Huron	972	291 60
Hawkesbury Village	Prescott.....	217	65 10
Hespeler Village.....	Waterloo	113	33 90
Humberstone	Welland	588	176 40
Houghton	Norfolk	384	115 20
Huron	Bruce	672	201 60
Hungerford	Hastings	805	241 50
Hallowell	Prince Edward	731	219 30
Holland Landing Village.....	York	136	40 80
Hawkesbury East	Prescott.....	764	229 20
Harwich	Kent	1,123	336 90
Harvey	Peterborough	121	36 30
Ingersoll Town	Oxford	836	250 80
Innisfil	Simcoe	1,042	312 60
Iroquois Village	Dundas	109	32 70
Keppel	Grey	454	136 20
Kemptville Village.....	Grenville	164	49 20
Kingston City	Frontenac	3,485	1,045 50
Kenyon	Glengarry	697	209 10
Kalador and Anglesea	Addington.....	155	46 50
Kinloss	Bruce	583	174 90
King	York	1,178	353 40
Kenebec.....	Frontenac	138	41 40
Kitley.....	Leeds	570	171 00
Kincardine	Bruce	712	212 60
Kingston	Frontenac	742	222 60
Kincardine Village.....	Bruce	319	95 70
Lindsay Town	Victoria	564	178 20
Lutterworth, Anson and Hindon	Victoria	120	36 00
Leeds and Lansdowne, Rear of	Leeds	464	139 20
Lobo	Middlesex	577	173 10
Lake	Hastings	47	14 10
Louth.....	Lincoln	336	100 80
Luther	Wellington	331	99 30
Longueil	Prescott.....	215	64 50
Laxton, Digby and Longford	Victoria.....	164	49 20
Leeds and Lansdowne, Front of.....	Leeds	650	195 00
Lancaster	Glengarry	758	227 40
London	Middlesex	2,164	649 20
Lochiel	Glengarry	731	219 30
Loughboro'	Addington.....	434	130 20
Muskoka	District of Muskoka	92	27 60
Middleton	Norfolk	551	165 30
Markham	York	1,270	381 00
Mara	Ontario	505	151 50
Morrison	Simcoe	118	35 40
Milton	Halton	174	52 20
McKillop	Huron	651	195 30
Moulton and Sherbrooke	Haldimand	351	105 30
Madoc	Hastings	596	178 80
Mosa	Middlesex	519	155 70
Monaghan South	Durham	209	62 70
Murray	Northumberland	635	190 50
Mount Forest Village	Wellington	264	79 20
Mulmur.....	Simcoe	613	183 90
Morrisburgh.....	Dundas	205	61 50
Malden	Essex	285	85 50
<i>Carried forward</i>			38,190 90

STATEMENT of payments made from Municipalities' Fund, &c.—*Continued.*

MUNICIPALITY.	COUNTY.	Rate-payers.	Amount.
			\$ cts.
<i>Brought forward</i>			38,190 90
Miller	Frontenac	37	11 10
Metcalfe	Middlesex	585	175 50
Marmora	Hastings	274	82 20
March	Carleton	206	61 80
Marysburgh	Prince Edward	809	242 70
Monck	Muskoka	86	25 80
Moore	Lambton	765	229 50
Medonte	Simcoe	466	139 80
Mersea	Essex	505	151 50
Malahide	Elgin	971	291 30
Marlborough	Carleton	352	105 60
Mountain	Dundas	561	168 30
Mariposa	Victoria	958	287 40
Melanthon	Grey	327	98 10
Maidstone	Essex	454	136 20
Manvers	Durham	649	194 70
Maryborough	Wellington	700	210 00
Morris	Huron	683	204 90
Minden	Peterborough	151	45 30
Merrickville Village	Grenville	149	44 70
Monaghan North	Peterborough	237	71 10
Minto	Wellington	847	254 10
Matilda	Dundas	767	230 10
McGillivray	Middlesex	862	258 60
Mono	Simcoe	649	194 70
Methuen	Peterborough	19	5 70
Newmarket Village	York	327	98 10
New Edinburgh	Carleton	102	30 60
Napanee Town	Lennox and Addington	503	150 90
Nissouri East	Oxford	650	195 00
Nassagaweya	Halton	525	157 50
Nichol	Wellington	516	154 80
Nissouri West	Middlesex	640	192 00
Niagara	Lincoln	397	119 10
Nepean	Carleton	673	201 90
Nottawasaga	Simcoe	1,050	315 00
Normanby	Grey	969	290 70
Newburgh Village	Addington	159	47 70
New Hamburg Village	Waterloo	207	62 10
Newcastle Village	Durham	193	57 90
Nelson	Halton	850	255 00
Osnabruk	Stormont	1,115	334 50
Olden	Frontenac	137	41 10
Oakville Town	Halton	406	121 80
Oshawa Village	Ontario	573	171 90
Oxford	Grenville	690	207 00
Orillia Village	Simcoe	167	50 10
Osprey	Grey	570	171 00
Orford	Kent	556	166 80
Oakland	Brant	185	55 50
Onondaga	Brant	307	92 10
Oxford East	Oxford	474	142 20
Orillia and Matchedash	Simcoe	318	95 40
Otonabee	Peterboro'	705	211 50
Oxford West	Oxford	443	132 90
Oxford North	Oxford	359	107 70
Osgoode	Carleton	747	224 10
Oil Springs Village	Lambton	88	26 40
Oneida	Haldimand	517	155 10
Oro	Simcoe	718	215 40
<i>Carried forward</i>			47,162 40

STATEMENT of payments made from Municipalities' Fund, &c.—*Continued.*

MUNICIPALITY.	COUNTY:	Rate-payers.	Amount.
			\$ cts.
<i>Brought forward</i>			47,162 40
Oso	Frontenac	91	27 30
Owen Sound Town	Grey	833	249 90
Orangeville	Wellington	223	66 90
Percy	Northumberland	662	198 60
Portsmouth Village	Frontenac	256	76 80
Preston Village	Waterloo	266	79 80
Plympton	Lambton	864	259 20
Pittsburgh and Howe Island	Frontenac	754	226 20
Port Dalhousie Village	Lincoln	194	58 20
Pilkington	Wellington	472	141 00
Plantagenet South	Prescott	279	83 70
Pickering	Ontario	1,260	378 00
Proton	Grey	391	117 30
Picton Town	Prince Edward	508	152 40
Puslinch	Wellington	716	214 80
Paris Town	Brant	677	203 10
Peel	Wellington	1,073	321 90
Plantagenet North	Prescott	514	154 20
Petrolia Village	Lambton	399	119 70
Pelham	Welland	537	161 10
Portland	Frontenac	509	152 70
Rama	Ontario	143	42 00
Romney	Kent	130	39 60
Rainham	Haldimand	380	114 00
Raleigh	Kent	732	219 60
Rochester	Essex	337	101 10
Roxborough	Stormont	554	166 20
Russell	Russell	350	105 00
Reach	Ontario	1,352	405 60
Richmond	Lennox	756	226 80
Rawdon	Hastings	604	181 20
Richmond Village	Carleton	92	27 60
Sandwich West	Essex	392	117 60
Sheffield	Addington	525	157 50
Stanhope	Peterborough	51	15 30
Sarawak and Town plot of Brooke	Grey	155	40 50
Seaforth Village	Huron	303	90 90
Stanley	Huron	623	186 90
Sarnia	Lambton	456	136 80
St. Thomas Town	Elgin	445	133 50
Sterling	Hastings	136	40 80
Sophiasburg	Prince Edward	525	157 50
Sarnia Town	Lambton	501	150 30
Seneca	Haldimand	517	155 10
St. Vincent	Grey	1,033	309 90
Stephen	Huron	631	189 30
Southampton Village	Bruce	150	45 00
Scott	Ontario	570	171 00
Streetsville Village	Peel	133	39 90
Sunnidale	Simcoe	295	88 50
Sombra	Lambton	541	162 30
Sandwich Town	Essex	217	65 10
Snowden	Peterborough	80	24 00
Stamford	Welland	556	166 80
Saugeen	Bruce	447	134 10
Sandwich East	Essex	601	180 30
Saltfleet	Wentworth	546	163 80
Sidney	Hastings	1,043	312 90
Scugog	Ontario	114	34 20
Smith	Peterborough	573	171 90
Scarboro'	York	914	274 20
<i>Carried forward</i>			56,150 70

STATEMENT of payments made from Municipalities' Fund, &c.—*Continued.*

MUNICIPALITY.	COUNTY.	Rate-payers.	Amount.
			\$ cts.
<i>Brought forward</i>			56,150 70
Somerville.....	Victoria.....	183	54 90
Southwold.....	Elgin.....	1,067	320 10
Sydenham.....	Grey.....	671	201 30
Storrington.....	Frontenac.....	539	161 70
Sullivan.....	Grey.....	557	167 10
Seymour.....	Northumberland.....	745	223 50
Strathroy Village.....	Middlesex.....	600	180 60
Tecumseth.....	Simcoe.....	712	213 60
Townsend.....	Norfolk.....	1,062	318 60
Toronto City.....	York.....	15,216	4,564 80
Toronto Gore.....	Peel.....	276	82 80
Thorold.....	Welland.....	511	153 30
Tilbury West.....	Essex.....	377	113 10
Tuckersmith.....	Huron.....	564	169 20
Thorah.....	Ontario.....	376	112 80
Tay.....	Simcoe.....	225	67 50
Tossorontio.....	Simcoe.....	193	57 90
Thurlow.....	Hastings.....	1,075	322 50
Tilbury East.....	Kent.....	341	102 30
Tiny.....	Simcoe.....	538	161 40
Trenton Village.....	Hastings.....	336	100 80
Toronto Township.....	Peel.....	1,156	346 80
Tudor, Wollaston and Limerick.....	Hastings.....	247	74 10
Torbolton.....	Carleton.....	114	34 20
Thorold Village.....	Welland.....	327	98 10
Tyendinaga.....	Hastings.....	1,229	368 70
Trafalgar.....	Halton.....	862	258 60
Turnberry.....	Huron.....	548	164 40
Uxbridge.....	Ontario.....	772	231 60
Usborne.....	Huron.....	631	189 30
Vespra.....	Simcoe.....	399	119 70
Vaughan.....	York.....	1,114	334 20
Vienna Village.....	Elgin.....	174	52 20
Verulam.....	Victoria.....	461	138 30
Wawanosh East.....	Huron.....	410	123 00
Wolford.....	Grenville.....	488	146 40
Wellington Village.....	Prince Edward.....	121	36 30
Whitby West.....	Ontario.....	710	213 00
Wolfe Island.....	Frontenac.....	504	151 20
Williams West.....	Middlesex.....	554	166 20
Whitby Town.....	Ontario.....	559	167 70
Whitby East.....	Ontario.....	696	208 80
Walpole.....	Haldimand.....	1,000	300 00
Whitchurch.....	York.....	813	243 90
Woolwich.....	Waterloo.....	817	245 10
Wainfleet.....	Welland.....	457	137 10
Wardsville.....	Middlesex.....	96	28 80
Waterloo.....	Waterloo.....	1,226	367 80
Wawanosh West.....	Huron.....	472	141 60
Welland Village.....	Welland.....	293	87 90
Wellesley.....	Waterloo.....	916	274 80
Walsingham.....	Norfolk.....	919	275 70
Williams East.....	Middlesex.....	500	150 00
Winchester.....	Dundas.....	676	202 80
Warwick.....	Lambton.....	859	257 70
Wilmot.....	Waterloo.....	829	248 70
Westminster.....	Middlesex.....	1,153	345 90
Willoughby.....	Welland.....	238	71 40
Waterloo Village.....	Waterloo.....	428	128 40
Windsor.....	Essex.....	883	264 90
Williamsburgh.....	Dundas.....	738	221 40
<i>Carried forward</i>			71,616 60

STATEMENT of payments made from Municipalities' Fund, &c.—*Concluded.*

MUNICIPALITY.	COUNTY.	Rate-payers.	Amount.
			8 cts.
<i>Brought forward</i>			71,616 60
Yonge and Escott, Rear of	Leeds	413	123 90
York	York	1,745	523 50
Yonge, Front of	Leeds	317	95 10
Yarmouth	Elgin	1,285	385 50
Yorkville Village	York	372	111 60
Zorra West	Oxford	617	185 10
Zone	Kent	225	67 50
Zorra East	Oxford	744	223 20
		244,440	73,332 00
County of Perth	For municipalities therein, by transfer to Municipal Loan Fund	7,199	2,159 70
U. C. Lanark and Renfrew	For municipalities therein, by transfer to Municipal Loan Fund	10,005	3,001 50
Hamilton City	Its proportion transferred to interest account	6,067	1,820 10
		267,711	80,313 39

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

No. 23.

DETAILED STATEMENT OF expenditure on account of Education, for the year ended 31st December, 1870.

TO WHOM PAID.	CITIES, TOWNS, VILLAGES AND SCHOOL SECTIONS.	\$	cts.	\$	cts.
GRAMMAR SCHOOLS.					
Treasurer	County of Brant	1,630	00		
Do	Bruce	322	00		
Do	Carleton	1,074	00		
Do	Essex	755	00		
Do	Elgin	636	00		
Do	Grey	554	00		
Do	Haldimand	1,178	00		
Do	Halton	428	00		
Do	Hastings	1,746	00		
Do	Huron	1,162	00		
Do	Kent	544	00		
Do	Lambton	244	00		
Do	Lanark	1,820	00		
Do	Leeds and Grenville	2,068	00		
Do	Lennox and Addington	1,653	00		
Do	Lincoln	2,643	00		
Do	Middlesex	879	00		
Do	Northumberland and Durham	4,515	00		
Do	Norfolk	1,622	00		
Do	Ontario	3,919	00		
Do	Oxford	1,051	00		
Do	Peel	949	00		
Do	Perth	1,451	00		
Do	Peterborough	2,197	00		
Do	Prescott and Russell	895	00		
Do	Prince Edward	403	00		
Do	Renfrew	1,208	00		
Do	Simcoe	1,517	00		
Do	Stormont, Dundas and Glengarry	2,183	00		
Do	Victoria	1,547	00		
Do	Waterloo	2,151	00		
Do	Welland	2,004	00		
Do	Wellington	1,462	00		
Do	Wentworth	1,465	00		
Do	York	1,808	00		

Do	City of Hamilton	2,017 00	57,500 00
Do	do Kingston	1,268 00	
Do	do London	673 00	
Do	do Ottawa	530 00	
Do	do Toronto	1,239 00	
COMMON SCHOOLS.			
Do	County of Brant	2,124 00	57,500 00
Do	do Bruce	4,777 00	
Do	do Carleton	3,151 00	
Do	do Elgin	3,239 00	
Do	do Essex	2,372 00	
Do	do Frontenac	2,721 00	
Do	do Grey	6,036 00	
Do	do Haldimand	2,339 00	
Do	do Halton	1,391 00	
Do	do Hastings	3,998 00	
Do	do Huron	6,896 00	
Do	do Kent	3,092 00	
Do	do Lambton	3,203 00	
Do	do Lanark	3,115 00	
Do	do Leeds and Grenville	3,517 00	
Do	do Lennox and Addington	2,519 00	
Do	do Lincoln	1,979 00	
Do	do Middlesex	6,833 00	
Do	do Norfolk	3,197 00	
Do	do Northumberland and Durham	7,280 00	
Do	do Ontario	4,476 00	
Do	do Oxford	4,548 00	
Do	do Peel	2,574 00	
Do	do Perth	4,218 00	
Do	do Peterborough	2,603 00	
Do	do Prescott and Russell	2,327 00	
Do	do Prince Edward	1,805 00	
Do	do Renfrew	2,006 00	
Do	do Simcoe	5,874 00	
Do	do Stormont, Dundas and Glengarry	5,947 00	
Do	do Victoria	3,011 00	
Do	do Waterloo	3,196 00	
Do	do Welland	1,894 00	
Do	do Wellington	5,523 00	
Do	do Wentworth	3,000 00	
Do	do York	5,838 00	
Do	City of Hamilton	1,585 00	
Do	do Kingston	943 00	
Do	do London	1,268 00	
Do	do Ottawa	759 00	
Do	do Toronto	2,748 00	
Carried forward.			143,282 40
			57,500 00

Education Statement—Continued.

TO WHOM PAID.	CITIES, TOWNS, VILLAGES AND SCHOOL SECTIONS.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>	143,282	00			57,500	00
	COMMON SCHOOLS—Continued.						
Treasurer	Town of Amherstburgh.....						
Do	Barrie	135	00				
Do	Belleville	162	00				
Do	Belleville	456	00				
Do	Berlin	244	00				
Do	Bothwell	130	00				
Do	Bowmanville	270	00				
Do	Brantford	620	00				
Do	Brockville	303	00				
Do	Chatham	445	00				
Do	Clifton	95	00				
Do	Cobourg	322	00				
Do	Collingwood	198	00				
Do	Cornwall	191	00				
Do	Dundas	203	00				
Do	Galt	360	00				
Do	Goderich	350	00				
Do	Guelph	420	00				
Do	Ingersoll	271	00				
Do	Lindsay	183	00				
Do	Milton	97	00				
Do	Napanee	193	00				
Do	Niagara	119	00				
Do	Oakville	113	00				
Do	Owen Sound	306	00				
Do	Paris	211	00				
Do	Perth	175	00				
Do	Peterborough	276	00				
Do	Pictou	155	00				
Do	Port Hope	400	00				
Do	Prescott	123	00				
Do	Sandwich	144	00				
Do	Sarnia	234	00				
Do	St. Catharines	438	00				
Do	Simcoe	155	00				
Do	St. Marys	282	00				
Do	St. Thomas	180	00				
Do	Stratford	273	00				

Do	Whitby	234 00
Do	Windsor	350 00
Do	Woodstock	396 00
Do	Village of Annaprior	140 00
Do	Ashburnham	120 00
Do	Aurora	129 00
Do	Bath	60 00
Do	Bradford	120 00
Do	Brampton	176 00
Do	Brighton	122 00
Do	Caledonia	108 00
Do	Cayuga	86 00
Do	Chippewa	112 00
Do	Clinton	176 00
Do	Colborne	86 00
Do	Dunnville	160 00
Do	Flora	161 00
Do	Embro	68 00
Do	Fergus	139 00
Do	Fort Erie	97 00
Do	Gananoque	170 00
Do	Garden Island	60 00
Do	Georgetown	102 00
Do	Hawkesbury	115 00
Do	Hespeler	122 00
Do	Holland Landing	175 00
Do	Iroquois	72 00
Do	Kemptville	126 00
Do	Kincardine	180 00
Do	Lanark	82 00
Do	Listowell	126 00
Do	Merrickville	104 00
Do	Mitchell	190 00
Do	Montisburg	122 00
Do	Mount Forest	131 00
Do	Newburg	95 00
Do	Newcastle	80 00
Do	New Edinburgh	50 00
Do	New Hamburg	115 00
Do	Newmarket	127 00
Do	Oil Springs	129 00
Do	Orangeville	90 00
Do	Orillia	133 00
Do	Oshawa	226 00
Do	Penbroke	55 00
Do	Petrolia	151 00
Do	Portsmouth	86 00
Do	Port Colborne	72 00
Do	Port Dalhousie	122 00
Carried forward		159,012 00
		57,500 00

Education Statement—Continued.

TO WHOM PAID.	CITIES, TOWNS, VILLAGES AND SCHOOL SECTIONS.			
		\$	cts.	\$ cts.
	<i>Brought forward.</i>	159,012 00		57,500 00
	COMMON SCHOOLS—Continued.			
Treasurer	Village of Preston	110 00		
Do	do Renfrew	61 00		
Do	do Richmond	54 00		
Do	do Saul Ste. Marie	50 00		
Do	do Seaford	140 00		
Do	do Smith's Falls	78 00		
Do	do Southampton	97 00		
Do	do Sterling	82 00		
Do	do Strathroy	180 00		
Do	do Streetsville	72 00		
Do	do Thorold	151 00		
Do	do Trenton	131 00		
Do	do Vienna	86 00		
Do	do Wardsville	72 00		
Do	do Waterloo	165 00		
Do	do Welland	111 00		
Do	do Wellington	54 00		
Do	do Yorkville	180 00		
Do	Pruce Mines	200 00		
Do	Township of Korah	50 00		
			161,046 00	
	SEPARATE SCHOOLS.			
Trustees	City of Hamilton	333 00		
Do	do Kingston	345 00		
Do	do London	222 00		
Do	do Ottawa	781 00		
Do	do Toronto	1,603 00		
Do	Town of Amherstburgh	100 00		
Do	do Barrie	67 00		
Do	do Belleville	200 00		
Do	do Brockville	112 00		
Do	do Berlin	32 00		
Do	do Brantford	85 00		
Do	do Gifton	50 00		
Do	do Cobourg	109 00		

Do	Dundas	100 00
Do	Guelph	155 00
Do	Ingersoll	58 00
Do	Lindsay	38 00
Do	Napanee	30 00
Do	Niagara	64 00
Do	Oakville	50 00
Do	Piton	68 00
Do	Prescott	108 00
Do	Paris	52 00
Do	Peterborough	140 00
Do	Perth	69 00
Do	Simcoe	9 00
Do	St. Marys	59 00
Do	St. Catharines	288 00
Do	Stratford	59 00
Do	Whitby	62 00
Do	Village of Chippewa	30 00
Do	Flora	30 00
Do	Fergus	20 00
Do	Newmarket	39 00
Do	Oshawa	46 00
Do	Pembroke	65 00
Do	Preston	28 00
Do	Portsmouth	36 00
Do	Smith's Falls	49 00
Do	Thorold	55 00
Do	Trenton	77 00
Do	Mount Forest	13 00
School Sections:—		
Do	3 and 4 Anderson	31 00
Do	1 and 6 Arthur	73 00
Do	3 do	33 00
Do	11 do	15 00
Do	4 do	19 00
Do	4 Asphodel	25 00
Do	2 Bedford	36 00
Do	15 Brighton	21 00
Do	23 Brockton	23 00
Do	6 Biddulph	28 00
Do	3 do and McGillivray	33 00
Do	3 Bromley	53 00
Do	15 Camden East	17 00
Do	6 Carrick	28 00
Do	15 Charlottenburgh	29 00
Do	16 do	34 00
Do	17 do	31 00
Do	7 Dalhousie	12 00
Do	9 Downie	53 00
Carried forward		
		6,668 00
		101,046 00
		57,500 00

Education Statement—Continued.

TO WHOM PAID.	CITIES, TOWNS, VILLAGES AND SCHOOL SECTIONS.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>	6,668	00	161,046	00	57,500	00
	SEPARATE SCHOOLS— <i>Continued</i> .						
	School Sections:—						
Trustees	2 Edwardsburgh	31	00				
Do	7 Ellice	14	00				
Do	6 Etobicoke	11	00				
Do	4 Elzevir	6	00				
Do	6 Flamboro East	7	00				
Do	2 do West	29	00				
Do	2 Glenelg	22	00				
Do	5 do	40	00				
Do	7 do and Artemesia	25	00				
Do	1 and 4 Gloucester, and 3 Osgoode	33	00				
Do	7 Grantham	37	00				
Do	1 Grattan	43	00				
Do	9 Harwich	24	00				
Do	9 Howard	6	00				
Do	8 Humberstone	50	00				
Do	14 Hungerford	12	00				
Do	21 Haldimand	28	00				
Do	4 Hawkesbury East	34	00				
Do	7 do	31	00				
Do	15 do	10	00				
Do	2 do	47	00				
Do	16 do	18	00				
Do	3 Holland	25	00				
Do	2 Hullett	24	00				
Do	8 Kingston	31	00				
Do	7 Kitley	8	00				
Do	7 Laucaster	9	00				
Do	14 do	21	00				
Do	13 do	14	00				
Do	10 Lochiel	88	00				
Do	12 do	33	00				
Do	1 Longueuil	29	00				
Do	5 Mara	22	00				
Do	5 Marlborough	28	00				
Do	7 Melancthon	6	00				

Education Statement—Continued.			
TO WHOM PAID.	SERVICE.	\$	cts.
	<i>Brought forward</i>	8,779 90	57,500 00
	SEPARATE SCHOOLS—Concluded.		
Trustees.....	School Sections:—		
Do.....	21 York.....	34 00	
Do.....	22 do.....	27 00	
Do.....	6 do.....	26 00	
Do.....	1 do.....	30 00	
			169,952 90
	POOR SCHOOLS.		
Treasurer.....	County of Addington.....	205 00	
Do.....	do Bruce.....	290 00	
Do.....	do Carleton.....	485 00	
Do.....	do Essex.....	20 00	
Do.....	do Frontenac.....	646 00	
Do.....	do Grey.....	305 00	
Do.....	do Hastings.....	1,220 00	
Do.....	do Kent.....	30 00	
Do.....	do Lanark.....	165 09	
Do.....	do Norfolk.....	35 00	
Do.....	do Peterborough.....	720 00	
Do.....	do Renfrew.....	400 00	
Do.....	do Simcoe.....	490 00	
Do.....	do Victoria.....	650 00	
Do.....	do Wellington.....	35 00	
Do.....	Village of Saint Ste Marie.....	50 00	
Do.....	do Parry Sound.....	100 00	
Do.....	do Section 1 Medora.....	50 00	
Do.....	do do 1 Howland.....	70 00	
Do.....	do do 1 Korah.....	40 00	
			6,000 00
	SUPERANNUATED TEACHERS.		
Hon. E. B. Wood.....	To pay:—		
	Anstey, J.....	33 00	
	Armstrong, James.....	54 33	
	Benson, William.....	49 67	

Deady, R.	43	84
Brown, John	56	67
Baldwin, Thomas	26	34
Bodfish, James	42	67
Baker, Thomas	40	33
Buchanan, Thomas	42	67
Bartley, Henry	40	67
Brown, F.	60	16
Brown, William	25	34
Barber, E.	39	17
Beaton, William	33	34
Briggs, James	82	33
Benton, James	51	33
Breckenridge, J.	70	67
Bigger, J. L.	51	33
Bell, William	21	67
Colville, John	94	00
Crooks, M.	90	00
Currie, D.	38	00
Corrie, William	35	67
Clarke, William	24	60
Cameron, John	31	00
Clarke, M.	32	16
Campbell, R.	68	33
Calder, D.	54	33
Cozens, E.	59	00
Donald, John	43	81
Dermot, William	25	33
Devereux, M.	49	67
Dods, John	45	00
Douglas, John	47	33
Dorothy, Thomas	75	33
Dennan, James	83	50
Ederington, M.	42	67
Fletcher, John	38	00
Forde, James	38	00
Foster, W.	47	33
Fitzpatrick, Peter	49	67
Fraser, W.	26	34
Ferguson, William	52	00
Flanagan, Thomas	42	67
Fraser, Alexander	108	67
Grafte, T. J.	38	00
Gibson, G.	40	33
Gillespie, Adam	52	60
Graydon, John	65	00
Glasford, William	39	17
Hutcheins, M.	47	33
Healey, John	56	67
Carried forward	2,568	87
	233,452	90

Education Statement—Continued.

TO WHOM PAID.	SERVICE.	\$ cts.	\$ cts.	\$ cts.
	<i>Brought forward</i>	2,508 87		233,452 90
Hon. E. B. Wood	<p><i>TO pay :—</i></p> <p>SUPERANNUATED TEACHERS—Continued.</p>			
	Hick, W	54 33		
	Hildyard, William	40 33		
	Hamilton, R.	33 24		
	Jenkins, Alexander	38 00		
	Judge, Charles	35 67		
	Jackson, A.	45 00		
	Jordan, R.	61 33		
	Kearns, William	51 33		
	Kee, David	35 67		
	Kennedy, J.	47 33		
	Kelhoe, James	40 33		
	Leonard, William	26 34		
	Leys, James	35 67		
	Lenaten, John	36 00		
	Lewis, William	105 00		
	Mahon, James	42 66		
	Mozier, C.	59 00		
	Mulhern, P. G.	63 67		
	Monaghan, John	31 00		
	Middleton, Alexander	42 67		
	Millar, William	19 33		
	Miskelly, John	23 16		
	Miller, Alexander	62 50		
	McDougall, D.	28 67		
	McQueen, J.	48 50		
	McCormick, A.	33 33		
	McLaren, H.	45 00		
	McDonnell, John	28 67		
	McGarry, J.	42 67		
	McCallum, R.	49 67		
	McGillis, A.	61 33		
	McGill, D.	38 00		
	McKay, A.	26 34		
	McNamara, John	26 34		
	McDonald, D.	73 17		

LIBRARIES, APPARATUS AND PRIZES.		
Books, &c.		358 30
do		307 55
		665 85
		239,952 90

Education Statement—Continued.

TO WHOM PAID.	S E R V I C E.	§ cts.		§ cts.	
		§	cts.	§	cts.
	<i>Carried forward</i>	655	85		239,952 90
	LIBRARIES, APPARATUS AND PRIZES—Continued.				
	Books, &c				
Morgan & Chase.....	do	61	65		
R. Carter & Bros.....	do	697	82		
Sampson, Low & Co.....	do	539	53		
D. & J. Salter & Co.....	do	1,492	99		
Nelson & Sons.....	do	853	37		
Griffith, Parran & Co.....	do	200	56		
J. D. Twigg.....	do	1,673	63		
C. Scrimmar & Co.....	do	282	23		
W. W. Gardner.....	do	146	90		
Geo. Reid.....	do	15	60		
Jas. F. Shaw & Co.....	do	149	66		
Milner & Sowerby.....	do	66	51		
Longmans, Green & Co.....	do	198	83		
Oliver & Boyd.....	do	47	31		
Geo. Snow & Co.....	do	81	11		
Johnston, Hunter & Co.....	do	320	72		
Alex. Strahan & Co.....	do	261	09		
Chas. Griffin & Co.....	do	564	17		
Burns, Oates & Co.....	do	235	06		
W. & R. Chambers.....	do	403	56		
Hy. Hall.....	do	55	28		
Brewer & Fileston.....	do	670	37		
Wm. Oliphant & Co.....	do	227	91		
Jas. Nisbet & Co.....	do	508	27		
S. W. Partridge & Co.....	do	258	53		
W. Tegg.....	do	317	85		
Houlston & Sons.....	do	271	20		
Routledge & Sons.....	do	1,019	37		
Hodder & Stoughton.....	do	318	91		
Gall & Inglis.....	do	539	29		
Jas. Campbell & Son.....	do	123	50		
W. Macintosh.....	do	185	73		
Smith & Son.....	do	189	32		
Bell & Pelly.....	do	426	82		
J. Murray.....	do	214	48		
Harper Bros.....	do	464	10		
W. P. Nimmo.....	do	526	88		

A. F. Potter.....	do	2,000 02
P. Wane & Co.....	do	894 08
Bumrose & Sons.....	do	39 76
Hurst & Blackett.....	do	103 65
Ward, Lock & Tyler.....	do	135 74
Cassel, Potter & Galpin.....	do	89 76
A. & C. Black.....	do	100 14
Groombridge & Sons.....	do	136 13
J. H. Sangster.....	do	106 00
Jno. Lovell.....	do	548 20
Copp, Clark & Co.....	do	1,246 03
S. Passmore.....	do	7 51
J. V. Mummery.....	do	175 43
Thos. Lailey.....	do	89 72
National Society, London.....	do	49 07
Hunter, Rose & Co.....	do	60 00
H. A. Wilkins.....	do	20 00
Rev. S. Rose.....	do	15 00
Brown Bros.....	do	378 05
Joseph Turner.....	do	1,156 80
Adam Miller.....	do	3 75
A. Dredge & Co.....	do	18 00
Rev. C. Pelley.....	do	40 00
G. Philip & Son.....	do	230 65
W. & A. K. Johnstone.....	do	323 03
Wm. Armstrong.....	do	25 00
E. Stamford.....	do	83 57
C. A. Bryce.....	do	25 00
A. Lovell & Co.....	do	210 00
R. Cantlin.....	do	91 49
Globes, mathematical instruments, &c.....	do	1,164 88
Microscopes, &c.....	do	643 50
Chemicals.....	do	54 65
Colouring maps.....	do	307 60
Expenses attending book auction, Montreal.....	do	84 30
Preparing maps.....	do	613 52
Map mounting, &c.....	do	1,826 47
Seals.....	do	48 10
Forwarding.....	do	459 39
Freight and cartage.....	do	798 11
Freight.....	do	32 25
Collector of Customs, Toronto.....	do	1,611 74
Copp, Clark & Co.....	do	449 80
Sparrow & Whatnough.....	do	21 89
Gooderham & Worts.....	do	90 00
Alcohol.....	do	310 35
Carpenter work.....	do	47 25
Paper.....	do	9 00
W. Moses.....	do	16 50
Basket.....	do	
Lumber.....	do	
Carried forward.....		32,408 05

Education Statement—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>	32,408	05			230,452	90
H. M. Wilkinson	LIBRARIES, APPARATUS AND PRIZES—Continued.						
	Express charges	6	06			32,414	11
	MUSEUM AND LIBRARY.						
	Books, &c.	867	46				
A. F. Potter	do	35	59				
E. J. Potter & Co.	do	19	94				
John Lovell	do	85	45				
C. Griffin & Co.	do	24	48				
A. Piddington	do	405	89				
W. A. Mansell	do	119	69				
L. Prang & Co.	do	68	90				
Copp, Clarke & Co.	do	9	45				
Brown Bros.	do	4	00				
Henry Rowsell	do	66	01				
R. Canton, J.	do	10	77				
H. M. Wilkinson	do	98					
Adams, Blackman & Lyons ..	do	38	50				
Hunter, Rose & Co.	Printing	154	93				
A. Dredge & Co.	Binding	9	00				
Art Journal	Subscription	5	20				
Toronto Globe	do	4	68				
Do Leader	do	4	00				
Church Herald	do	3	75				
Canada Freeman	do	6	00				
Montreal Witness	do	3	31				
New York Observer	do	66	10				
V. Casel	Plaster brackets	78	00				
Charles Potter	Brass	39	65				
George Harding	Iron	48	92				
D. Brucciani	Cast of sculpture	5	00				
G. B. Macintosh	Bust	499	79				
Gerrie & Farish	Vases, pedestals, &c.	88	50				
J. F. Corin	Labels	67	75				
S. Passmore	Stuffing birds	10	10				
R. A. Wood	Chemicals	32	23				
Alexander Hamilton	Oil, paints, &c.						

N. L. Piper	Registers	5 50		
James Turvane	Blacksmithing	4 33		
John Rogers	Carpenter work	155 63		
N. Meehan	Cartage	75 27		
J. B. Carter	Map mounting	269 92		
F. W. Coate & Co	Pictures	6 20		
George Chaffey & Bro.	Fuel	250 00		
H. M. Wilkinson	Insects, &c.	11 05		3,671 92
JOURNAL OF EDUCATION.				
Expenditure on account of this service, for the year, as per Statement No. 12, page 47				
GRAMMAR SCHOOL INSPECTION.				
Expenditure, as per Statement No. 12, page 47				
DEPOSITORY.				
Salaries as per Statement No. 12, page 47				
Contingencies, as per Statement No. 13, page 67				
NORMAL AND MODEL SCHOOLS.				
To pay salaries, as per Statement No. 12, page 47				
Contingencies for the year, as per Statement No. 13, page 69				
EDUCATION OFFICE.				
To pay salaries, as per Statement No. 12, page 46				
Contingencies for the year, as per Statement No. 13, page 67				
Total				
		11,813 00		14,335 98
		2,582 98		315,887 92

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
Toronto, December 31st, 1870.

No. 24.

STATEMENT shewing the amount of Stationery supplied the various Departments by the Queen's Printer, during the year ended December 31st, 1870.

	Stationery supplied	\$	cts.	%	cts.
Lieutenant-Governor's Office	.....	38	05		
Attorney-General's	do	46	06		
Executive Council	do	46	05		
Secretary & Registrar's	do	126	46		
Registrar-General's	do	126	24		
Treasurer's	do	240	89		
Agriculture and Public Works Office.	do	1,081	48		
Crown Lands	do	52	77		
Inspector of Prisons	do	31	78		
Auditor's	do	7	90		
Queen's Printer's	do	26	65		
Law Stamp and License	do	25	52		
Legislative Assembly	do	273	88		
Court of Chancery	do	280	73		
Do Queen's Bench	do	105	92		
Lunatic Asylum, Toronto.	do	96	19		
Deaf and Dumb Institute	do	23	85		
Education Office	do	1,850	28		4,483 71
<hr/>					
Stock on hand December 31st, 1869		1,975	96		
do purchased to do 1870		6,170	27		
LESS—Amount issued to Departments		8,146	23		
Stock on hand December 31st, 1870.		4,483	71		
		3,662	52		

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

No. 25.

THE LAW SOCIETY, in account with the Province of Ontario.

1870	Dr.	\$ cts.	\$ cts.
Jan. 1.....	To Debentures brought down 16,000 00 " balance of open account..... 128,368 19		
June 30	" half-year's interest on debentures..... do open account.....	144,368 19 480 00 3,209 20	
Dec. 31	" payments by Ontario " half-year's interest on debentures..... do open account.....	1,544 66 480 00 3,209 20	
	Cr.		153,291 25
	By Law Stamp fees " receipt from W. Leggo	14,500 00 400 00	
			14,900 00
	Dr.		138,391 25
1871 Jan. 1.....	To Debentures brought down..... 16,000 00 " balance of open account..... 122,391 25		
			138,391 25

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, 31st December, 1870.

No. 26.

STATEMENT of amounts charged against appropriation for Unforeseen and Unprovided, during the year ended 31st December, 1870.

		\$ cts.	\$ cts.
	Amount of appropriation.....		20,000 00
	REGISTRAR-GENERAL'S DEPARTMENT.		
Joseph Lesslie	Postages, Registrar-General's Office, to 31st December, 1870.....	122 05	
H. S. Crewe	Services as Clerk in Registrar-General's Office to 31st December, 1870	669 17	
Hunter, Rose & Co.	Printing for Registrar-General's Office.....	971 66	
Hon. E. B. Wood	To pay Registrars of Births, Deaths and Marriages....	3,700 00	
H. S. Crewe	Cab hire and express charges, <i>re</i> Births, Deaths and Marriages	90 59	
W. Firstbrook	Boxes supplied for forms, <i>re</i> Births, Deaths and Marriages	13 64	
Hon. M. C. Cameron....	To pay Registrars of Births, Deaths and Marriages....	108 63	
J. R. Armstrong & Co. .	Stove for Registrar-General's vault	10 08	
John Notman	Stationery for do	26 65	5,712 47
	AUDITOR'S OFFICE.		
W. R. Nursey	Services as Clerk in Auditor's Office, to 31st December, 1870.....	734 00	
Robertson & Cook	Printing circulars	3 00	737 00
	ADMINISTRATION OF JUSTICE.		
John Notman	Cartage of stationery to Osgoode Hall.....	25	
John Alexander	Cleaning, &c., Superior Courts	22 40	
J. W. Rose	On account of salary, &c., Stipendiary Magistrate, Parry Sound.....	817 77	840 42
	CHARGES ON REVENUE—MISCELLANEOUS.		
J. & J. Taylor.....	Law Stamp Safes		815 00
	Balance unexpended.....		8,104 89
			11,895 11
			20,000 00

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

No. 27.

STATEMENT of amounts expended in 1870, and not provided for by the Estimates of 1870 and 1871.

[illegible]

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

No. 28.

STATEMENT showing the Estimates, the amount expended by the Government of Ontario, and the amounts unexpended and over-expended, for the year ending 31st December, 1870.

SERVICE.	SUB-HEAD OF SERVICE.	Appropriation.		Expenditure.		Unexpended.		Overexpended.	
		\$	cts.	\$	cts.	\$	cts.	\$	cts.
Civil Government	Government House	2,415 00		3,234 33				819 33	
	Lieutenant-Governor's office, salaries	2,400 00		1,260 00		1,200 00			65 81
	Do do contingencies	300 00		365 81					
	Executive Council Office, salaries	1,015 00		1,015 00		338 59			
	Do do contingencies	6,150 00		6,150 00					
	Attorney-General's Office, salaries	2,015 00		1,277 31		737 69			
	Do do contingencies	8,005 00		8,063 43		1 57			
	Treasury Department, salaries	8,075 00		2,543 27		531 73			
	Do do contingencies and repairs	8,295 00		8,784 15		210 85			
	Secretary's Department, salaries	2,775 00		1,982 36		732 54			
	Do do contingencies	9,435 00		5,712 47				5,712 47	
	Registrar-General, expenditure	3,575 00		9,965 00					
	Public Works Department, salaries	30,565 00		30,273 22		898 02			
	Do do contingencies, &c.	9,680 00		6,019 15		291 68			
Miscellaneous	Crown Lands Department, salaries					3,650 85			
	Do do contingencies, &c.								
	Gratuities, public officers	7,000 00		2,481 67		4,518 33			
	Inspector of Prisons, salary	2,000 00		2,000 00					
	Do do contingencies	650 00		736 39				86 39	
	Auditor, salary	400 00		333 75		66 25			
	Do do contingencies	2,000 00		2,000 00					
	Do Clerk	50 00		63 18					
	Inspector of Registry Offices			731 00				19 18	
	Queen's Printer, salary	2,000 00		2,000 00				734 00	
	Do do contingencies	800 00		200 00		600 00			
	Official Gazette	75 00		69 42		5 58			
	Salaries	3,390 00		4,345 83				355 85	
Legislation	Sessional writers, &c.	10,825 00		9,350 00		1,475 00			
	Postages, &c.	2,000 00		960 05		1,039 95			
	Stationery	2,500 00		1,503 82		996 18			
	Printing, &c., Statutes	10,000 00		11,665 09					
	Expenses of elections	2,800 00		1,461 25		1,338 75		1,055 99	
	Increase of library	1,000 00		341 05		658 95			
				1,107 21				107 21	

Administration of Justice.....	Indemnity to Members.....	33,000 00	5,480 32	33,419 68	
	Contingencies and repairs.....	6,590 00	6,228 18	361 82	
Public Works and Buildings	Court of Chancery.....	15,759 00	14,582 36	1,176 64	
	Court of Queen's Bench	6,950 00	6,904 99	45 01	
	Court of Common Pleas	4,650 00	4,363 66	286 34	
	Criminal Justice.....	122,000 00	111,899 07	10,100 93	
	Miscellaneous Justice.....	44,700 00	42,253 94	2,446 06	
Asylum Maintenance	London Lunatic Asylum	190,205 92	157,561 63	32,644 29	99 82
	Toronto Lunatic Asylum.....	26,132 94	26,232 76	.....	.....
	Deaf and Dumb Institute.....	40,719 98	36,497 53	4,222 45	.....
	Asylum for the Blind	75,000 00	15,533 94	59,466 06	.....
	Government House	33,001 83	37,807 29	.....	.....
	Reformatory.....	8,000 00	7,500 95	499 05	.....
	Court House and Gaol, Sault Ste. Marie	2,500 00	1,624 42	875 58	.....
	Lock, Renssieu River.....	28,046 14	11,732 27	16,253 87	.....
	Lock, Balsam Lake	19,070 45	3,837 32	15,833 13	.....
	Lock, Young's Point.....	19,244 55	18,804 95	439 60	.....
	Navigation Seagow River.....	21,000 00	19,040 61	1,959 39	.....
	Cut, Lake Joseph	10,000 00	6,794 30	3,205 70	.....
	Washago and Gravenhurst Road.....	25,000 00	17,203 43	7,796 57	.....
	Surveys and Drainage	200,000 00	46,371 79	153,628 21	.....
	Other surveys	4,000 00	.....	4,000 00	.....
	Repairs, Brock's Monument	1,000 00	981 10	18 90	.....
Reformatory	Asylum for Insane, Toronto	83,177 00	70,818 75	12,358 25	.....
	Do Malden	23,495 00	24,832 68	4,642 32	.....
Agriculture and Arts.....	Do Orillia	17,026 00	15,416 55	1,609 45	.....
	Do Rockwood	28,600 00	.....	28,600 00	.....
Immigration.....	Do London	5,000 00	19,145 43	19,145 43	.....
	Deaf and Dumb Institute.....	.....	5,219 03	.....	219 03
Hospitals and Charities.....	.....	22,478 00	22,473 36	4 64	.....
	.....	69,450 00	66,722 20	2,727 80	.....
Literary and Scientific Institutions .....	.....	24,700 00	32,087 65	.....	.....
	.....	42,510 00	42,510 00	.....	.....
Education .....	.....	1,350 00	1,350 00	.....	.....
	Common and Separate Schools	170,000 00	169,952 90	47 10	.....
	Poor Schools.....	6,000 00	6,000 00	.....	.....
	Normal School, Salaries	10,842 00	10,862 00	.....	20 00
	Do Contingencies	5,850 00	6,307 74	.....	457 74
	Grammar Schools	87,500 00	57,500 00	.....	.....
	Libraries, Maps and Apparatus.....	32,500 00	32,414 11	85 89	.....
<i>Carried forward</i>		1,690,643 81	1,313,707 93	418,027 24	41,151 36

Statement, &c.—*Concluded.*

SERVICE.	SUB-HEAD OF SERVICE.	Appropriation. \$ cts.	Expended. \$ cts.	Unexpended. \$ cts.	Overexpended. \$ cts.
	<i>Brought forward.</i>	1,690,645 81	1,313,767 93	418,027 24	41,151 36
Education	Depository, Salaries	3,000 00	3,066 00	24 00	598 27
	Do Contingencies	819 00	1,417 27		
	Superannuated Teachers	6,500 00	6,500 00		
	Museum	3,778 43	3,671 92	106 51	
	<i>Journal of Education</i>	1,800 00	1,800 00		
	Grammar School Inspection	2,000 00	2,000 00		
	Education Office, Salaries	11,813 00	11,813 00		
	Do Contingencies	1,985 00	2,582 98		599 98
Municipalities Fund			80,313 30		
Charges on Revenue	Miscellaneous	8,750 00	5,442 81	3,307 19	6,120 27
	Arbitration	10,000 00	16,120 27		
	Board of Surveyors	400 00	170 00	230 00	
	Salaries, &c., of Agents	35,000 00	25,933 07	9,066 93	
	Refunds	15,000 00	12,318 10	2,681 90	
	Surveys	50,000 00	40,000 00	10,000 00	
	Claims, lands twice sold	5,000 00	2,060 00	2,940 00	
	Boundary survey	4,000 00		4,000 00	
Colonization Roads		50,000 00	50,000 00		
Stationary Account			1,686 56		
	Total	1,900,577 24	1,580,663 21	450,383 77	48,409 88

No. 29.

COMPARATIVE STATEMENT, shewing the amounts expended by the Government of Ontario during the three years ending 31st December, 1870.

SERVICE.	SUB-HEAD OF SERVICE.			Expenditure, 1868.		Expenditure, 1869.		Expenditure, 1870.	
				\$	cts.	\$	cts.	\$	cts.
Civil Government		Lieutenant-Governor's Office, Salaries.....		1,106	65	1,200	00	1,200	00
		Government House, Maintenance		2,836	00	2,459	46	3,294	33
		Executive Council Office, Salaries.....		954	76	1,015	00	1,015	00
		Attorney-General's Office, do		8,286	46	6,150	00	6,150	00
		Treasury Department, do		7,302	29	7,165	00	8,063	43
		Secretary-Registrar's Office, do		8,687	00	8,081	00	8,784	15
		Registrar-General, do		9,800	66	7,765	00	5,712	47
		Department of Agriculture and Public Works, Salaries.....		38,119	52	34,872	31	39,965	00
		Crown Lands Department, Salaries		23,778	34	*21,883	34	30,273	32
		Departmental.....						15,541	39
		Distressed Fishermen, Nova Scotia.....		5,000	00				
Contingencies		Inspector of Asylums and Prisons, Salary and Contingencies.....		1,180	62	2,530	85	3,070	14
		Official Gazette.....		1,435	43	3,136	42	4,345	85
		Towards facilitating transport on Lake Superior.....		11,000	00				
		Loan to Toronto General Hospital				4,000	00	2,481	07
		Gratuities				13,180	60	2,803	18
		Provincial Auditor, Salary and Contingencies						2,000	00
		Inspector of Registry Offices, Salary				2,000	00	209	42
		Queen's Printer, Salary.....						16,120	27
		Arbitration		200	00	375	00		
		Salaries		9,906	01	11,010	53	9,350	00
		Contingencies		3,205	05	3,279	53	6,228	18
Legislation.		Indemnity to Members.....		61,800	00	44,519	90	5,480	32
		Sessional Writers, Messengers and Pages		4,451	25	1,856	25	960	05
		Postages, &c.....		3,881	56	2,577	92	1,503	82
		Stationery, Printing and Binding		9,843	51	13,248	02	11,055	99
		Printing and Binding Statutes		1,513	99	1,649	13	1,461	25
		Expenses of Elections		499	89	601	90	341	05
		Library		787	92	1,142	21	1,107	21
		<i>Carried forward.....</i>		215,696	91	197,698	77	158,517	49

* In the Estimates of 1869, the contingencies of the Education Department were erroneously charged to Civil Government.

Statement, &c.—Continued.

SERVICE.	SUB-HEAD OF SERVICE.	Expenditure, 1868.		Expenditure, 1869.		Expenditure, 1870.	
		\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward.</i>	215,696	91	197,698	77	158,517	49
Administration of Justice.	Court of Chancery, Salaries.....	14,441	46	14,735	00	13,135	00
	Court of Queen's Bench, Salaries.....	6,905	92	6,493	33	6,200	60
	Court of Common Pleas, Salaries.....	4,240	25	4,200	00	4,200	00
	Contingencies.....	1,200	81	1,303	50	2,236	01
	Criminal Justice.....	118,104	61	108,223	43	111,869	07
	Miscellaneous Justice.....	27,102	76	37,471	29	42,253	94
Public Works and Buildings		123,010	29	257,593	43	407,734	29
Immigration.....				17,595	00	32,087	65
Agriculture and Arts.....		66,034	00	67,551	41	66,722	20
Hospitals and Charities.....		39,000	00	40,000	00	42,510	00
Literary & Scientific Institutions.		3,000	00	3,000	00	1,350	00
Education.....		327,487	51	266,373	53	315,887	92
Asylum Maintenance.....	Toronto Lunatic Asylum.....	76,543	96	73,813	86	70,818	75
	Malden do.....	35,313	12	32,450	98	24,852	68
	Orillia do.....	17,336	87	16,880	62	15,416	55
	London do.....					19,145	43
	Belleville Deaf and Dumb Institute.....					5,219	03
Reformatory.....		22,992	24	23,557	50	22,473	36
Charges on Revenue.....	Crown Lands Expenditure.....	40,653	49	41,083	97	80,481	17
	Miscellaneous.....					5,442	81
Colonization Roads.....		31,959	42	35,589	94	50,000	00
Municipalities Fund.....				108,596	73	80,313	30
Stationary Office.....				3,735	63	1,686	53
Unforeseen and Unprovided.....		12,229	15	6,039	51	*	*
	Total.....	1,183,852	77	1,414,668	83	1,580,663	21

* The expenditure under Unforeseen and Unprovided for 1870 are included in the several services for which the expenditure was made. See Statement No. 26.

STATEMENTS
OF
RECEIPTS AND EXPENDITURES
ON ACCOUNT OF THE
PROVINCE OF ONTARIO,
DURING THE TEN MONTHS ENDING 31ST OCTOBER,
1871.

Laid before the Legislative Assembly by Command.
DECEMBER, 1871.



Toronto :
PRINTED BY HUNTER, ROSE & Co., 86 AND 88 KING ST. WEST.
1871.

To His Excellency the Honorable WILLIAM PEARCE HOWLAND, Companion of the Most Honorable Order of the Bath, Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR EXCELLENCY :

The undersigned has the honour to present to Your Excellency STATEMENT OF THE RECEIPTS AND EXPENDITURES on account of the PROVINCE OF ONTARIO, during the Ten Months ending this day.

Respectfully submitted.

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, 31st October, 1871.

CONTENTS.

	Page.		Page.
STATEMENT OF CASH.....	1	PUBLIC WORKS AND BUILDINGS— <i>Continued.</i>	
Do OF INVESTMENTS	2	Toronto Lunatic Asylum	7
Do OF RECEIPTS	3	Deaf and Dumb Institute	7
Do OF EXPENDITURE.....	4	Blind Asylum.....	7
CIVIL GOVERNMENT:		Reformatory, Penetanguishene.....	7
Government House	4	Court House and Gaol, Sault Ste. Marie ...	7
Lieutenant-Governor's Office—Salaries.....	4	Lock on Rosseau River, Muskoka	7
Executive Council Office	4	Lock at Young's Point	7
Attorney-General's Office	4	Lock between Balsam and Cameron Lakes. ...	7
Treasury Department	4	Improvement of Navigation, Scugog River. ...	7
Secretary and Registrar's Office	5	Cut between Lakes Joseph and Rosseau ...	7
Registrar-General's Branch	5	Road between Washago and Gravenhurst... ..	7
Department of Agriculture and Public Works—Salaries	5	Surveys and drainage of Swamp Lands.....	7
Crown Lands Department—Salaries	5	Agricultural College and Farm.....	7
MISCELLANEOUS:—		Technical College.....	7
Gratuities	5	Central Prison	7
Inspector of Prisons.....	5	Asylum for Adult Idiots	7
Provincial Auditor	5	Normal and Model Schools.....	7
Inspector of Registry Offices.....	5	Departmental Buildings.....	7
Queen's Printer.....	5	Pigeon River Works	7
<i>Official Gazette</i>	5	Sydenham River Works	7
CHARGES ON REVENUE:—		Nottawasaga River Works	7
Miscellaneous.....	9	Kaministiquia River Works	7
CROWN LANDS EXPENDITURE:—		Miscellaneous.	7
Board of Surveyors	9	ASYLUM MAINTENANCE	7
Salaries, &c., of Agents	9	REFORMATORY MAINTENANCE.....	7
Refunds.	9	AGRICULTURE AND ARTS.....	7
Surveys	9	IMMIGRATION	7
Boundary Survey Line	9	MISCELLANEOUS.	9
COLONIZATION ROADS	9	HOSPITALS AND CHARITIES.....	8
ARBITRATION	9	LITERARY AND SCIENTIFIC INSTITUTIONS	8
LEGISLATION:—		EDUCATION	9
Salaries.	5	MUNICIPALITIES' FUND	9
Sessional Messengers, Writers and Pages... ..	5	LAND IMPROVEMENT FUND.....	9
Postages and cost of House Post Office.....	5	STATIONERY ACCOUNT	9
Stationery, including Printing Paper, &c... ..	5	STATEMENT OF CONTINGENCIES:—	
Printing, Binding and Circulating the Statutes.....	5	Lieutenant-Governor's Office.....	10
Expenses of Elections	5	Executive Council Office	11
Parliamentary Library	6	Attorney-General's Office	11
Indemnity to Members	6	Treasury Department.....	11
Repairs to Buildings.....	6	Secretary and Registrar's Office	12
ADMINISTRATION OF JUSTICE:—		Department of Agriculture and Public Works	12
Court of Chancery—Salaries.....	6	Crown Lands Department.....	14
Do of Queen's Bench	6	Auditor's Office.....	14
Do of Common Pleas	6	Queen's Printer.....	14
Deputy Clerks of the Crown and Pleas.....	6	Legislation	15
Criminal Justice, Criminal Prosecutions ...	6	Court of Chancery	15
Do Administration of	6	Court of Queen's Bench	16
Do Special Services	6	Court of Common Pleas	16
Miscellaneous Justice	7	Normal and Model Schools	17
PUBLIC WORKS AND BUILDINGS:—		Education	18
London Lunatic Asylum	7	STATEMENT OF BALANCES OF APPROPRIATIONS.....	19

No. 1.

STATEMENT of Receipts and Expenditure of the Province of Ontario for the ten months ended 31st October, 1871.

1871	Dr.	\$ cts.	1871	Cr.	\$ cts.
Jan. 1.....	To Balance on hand			By Payments as per Statement No. 4	1,555,096 51
	To Receipts as per Statement No. 3.....	199,006 33		By amount of investment in Dominion of Canada 5% bonds	1,192,333 33
	To amount withdrawn from Special Deposit Account, Bank of Montreal	1,150,000 00		By amount on special deposit, Bank of Montreal....	500,000 00
				By Bank of Montreal balance of cash account	41,217 05
		3,288,046 89			3,288,046 89

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, October 31st, 1871.

No. 2.

STATEMENT of Investments made during the ten months ended 31st October, 1871.

TO WHOM PAID.	NATURE OF INVESTMENT.	Amount.	Total Amount.
		\$ cts.	\$ cts.
Hon. Receiver General.....	For the purchase of £250,000 five per cent. bonds of the Dominion of Canada, at 98 per cent.	1,192,333 33	1,192,333 33
Bank of Montreal	Special deposit bearing interest at 4 per cent.....	500,000 00	500,000 00
		2,747,805 01	1,692,333 33
	Amount of investments made in 1868	850,000 00	
	do do 1869	705,471 68	
	do do 1871	1,192,333 33	
	Amount of special deposits made in 1869.....	687,194 06	
	do do 1870.....	862,980 25	
	do do 1871.....	500,000 00	
	Less amount withdrawn in 1871.....	2,040,174 31	
		1,150,000 00	
		890,174 31	
		3,637,979 32	

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, October 31st, 1871.

No. 3.

STATEMENT of Receipts of the Province of Ontario for the ten months ended
31st October, 1871.

	\$	cts.	\$	cts.	\$	cts.
<i>Dominion of Canada.</i>						
On account of Subsidy and General Account.....					1,020,000	00
<i>Reformatory.</i>						
Reformatory Prison, Penetanguishene.....					210	00
<i>Lunatic and other Asylums.</i>						
Asylum for the Insane, Toronto.....	12,456	08				
Do London.....	766	12				
Do Rockwood.....	433	57				
Deaf and Dumb Institution, Belleville.....	1,388	87				
<i>Education.</i>					15,044	64
On account of Education.....					26,527	46
<i>Municipal Loan Fund.</i>						
On account of Consolidated Municipal Loan Fund.....					16,824	00
<i>Investments.</i>						
Interest on account of Investments.....					129,603	60
<i>Casual Revenue.</i>						
Fines, fees and forfeitures.....	8,612	94				
Unclaimed funds in the hands of Division Court Clerks.....	47	29				
Sale of old material, Government House.....	173	98				
<i>Tavern and other Licenses.</i>					8,834	21
Tavern, Shop and Pawnbrokers' Licenses.....					55,945	12
<i>Algoma Taxes.</i>						
On account of patented lands in Algoma.....					4,899	24
<i>Law Stamps.</i>						
Law Stamps.....					62,040	49
<i>Ontario Gazette.</i>						
On account of Official Gazette.....					8,384	19
<i>Ontario Statutes.</i>						
On account of Statutes.....					1,117	20
<i>Ontario Journals.</i>						
On account of Journals.....					13	00
<i>Territorial Revenue.</i>						
Special Funds—Clergy Lands.....	63,650	31				
Common School Lands.....	64,571	21				
Grammar do.....	5,556	43				
Crown Lands Revenue.....	178,653	37				
Woods and Forests.....	236,705	98				
Amounts in suspense.....	41,060	11				
					456,419	46
					1,939,640	56

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, October 31st, 1871.

Contingencies do as per Statement, page 13.....	1,881 00	10,518 31	
CROWN LANDS DEPARTMENT.			
Salaries to 31st October, 1871	24,904 75		
Contingencies do as per Statement, page 14	6,019 45	30,924 20	
<i>East Wing, Parliament Buildings.</i>			
Carpenter work, tinsmithing, &c.....		2,062 29	
<i>Miscellaneous.</i>			
Gratuities	3,200 00		
<i>Inspector of Prisons :</i>			
Salary to 31st October, 1871	1,666 61		
Travelling expenses, &c	713 30		
Clerk.....	406 00		
<i>Provincial Auditor's Office :</i>			
Salaries to 31st October, 1871	2,274 74		
Contingencies do as per Statement, page 14	10 68		
<i>Inspector of Registry Offices :</i>			
Salary to 30th September, 1871	1,500 00		
<i>Queen's Printer :</i>			
Salary to 31st October, 1871	1,000 00		
Contingencies do as per Statement, page 14	70 08		
<i>Official Gazette</i>	2,573 77	13,415 18	93,606 95
LEGISLATION.			
Salaries to 31st October, 1871	7,420 00		
Contingencies do as per Statement, page 15	1,798 82		
Sessional Writers, Messengers and Pages.....	9,218 82		
Postages and cost of House P.O	3,408 60		
Stationery, including printing paper, printing and binding.....	2,191 73		
Printing, binding and distributing the Statutes	10,397 63		
Contested Elections.....	1,873 46		
Expenses of Elections.....	1,020 29		
	17,161 50		
<i>Carried forward</i>		45,272 03	93,606 95

Legislation—*Concluded.*—Administration of Justice.—Public Works and Buildings.—Asylum Maintenance.—Reformatory.—Agriculture and Arts.—Immigration.

TO WHOM PAID.	S E R V I C E.	\$	cts.	\$	cts.
	<i>Brought forward</i>			45,272	03
	LEGISLATION— <i>Concluded.</i>				
	Increase of Library			193	70
	Indemnity to Members and mileage			33,799	08
	Repairs to buildings.....			2,843	32
	ADMINISTRATION OF JUSTICE.				
	<i>Court of Chancery.</i>				
	Salaries to 31st October, 1871	13,992	53		
	Contingencies do as per Statement, page 15	1,124	16	15,116	69
	<i>Court of Queen's Bench.</i>				
	Salaries to 31st October, 1871	5,216	64		
	Contingencies do as per Statement, page 16	605	02	5,821	66
	<i>Court of Common Pleas.</i>				
	Salaries to 31st October, 1871	3,499	99		
	Contingencies do as per Statement, page 16	151	70	3,651	69
	<i>Court of Error and Appeal.</i>				
	Salaries to 30th September, 1871			7,537	50
	Crown Counsel Prosecutions.....			4,944	10
	Administration of Criminal Justice.....			74,145	94
	Special services			1,435	53
	<i>Deputy Clerks of the Crown and Pleas.</i>				
	Salaries to 30th September, 1871.....			9,040	67
	Repairs, Osgoode Hall			233	46
	Administration of Justice in Algoma, Nipissing, Muskoka, Pary Sound, Thunder Bay, and other services			13,148	70

Seals and other contingencies.....	18 50	
Registry Offices, Lock-up Houses, and purchase of ground at Parry Sound and Thunder Bay	2,675 85	137,770 29
PUBLIC WORKS AND BUILDINGS.		
London Lunatic Asylum.....	60,292 78	
Toronto Lunatic Asylum	30,297 17	
Belleville Deaf and Dumb Institute	8,903 05	
Brantford Blind Institute	45,494 81	
Reformatory, Penetanguishene.....	665 38	
Court House and Gaol, Sault Ste. Marie	198 63	
Young's Point Lock.....	192 18	
Agricultural College and Farm.....	46,850 75	
Technical College	36,980 52	
Central Prison	2,438 40	
Asylum for Adult Idiots.....	11,751 00	
Normal and Model Schools.....	1,705 40	
Departmental Buildings	9,673 05	
Rosseau River Lock.....	6,669 00	
Lock between Balsam and Cameron Lakes	7,833 42	
Saugog River Works	2,005 75	
Cut between Lakes Joseph and Rosseau	8,377 96	
Washago and Gravenhurst Road	407 95	
Pigeon River Works	109 60	
Sydenham River Works.....	786 49	
Nottawasaga River Works.....	188 70	
Kaministiquia River Works	55,468 23	
Surveys and Drainage.....	6,016 22	
Miscellaneous.....		351,087 31
ASYLUM MAINTENANCE.		
Toronto Lunatic Asylum	57,761 96	
London Lunatic Asylum	43,530 67	
Orillia Lunatic Asylum	21 32	
Belleville Deaf and Dumb Asylum	17,613 81	
REFORMATORY.		
Maintenance		118,927 76
AGRICULTURE AND ARTS.		
Grants on account of this service.....		10,480 25
IMMIGRATION.		
On account of this service		72,407 90
		20,504 72
		892,893 32

Carried forward.

Hospitals and Charities.—Literary and Scientific Institutions.—Education.—Miscellaneous.—Municipalities' Fund.—Land Improvement Fund.—Charges on Revenue.—Colonization Roads.—Stationery Office.—Departmental Contingencies.

TO WHOM PAID.	S E R V I C E.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>					892,893	32
	HOSPITALS AND CHARITIES.						
	Grants on account of this service.....					38,500	00
	LITERARY AND SCIENTIFIC INSTITUTIONS.						
	Grants on account of this service.....					1,350	00
	EDUCATION.						
	<i>Public and Separate Schools</i>			172,369	16		
	<i>Poor Schools</i>			2,370	00		
	<i>High Schools</i>			65,976	00		
	<i>Normal and Model Schools.</i>						
	Salaries to 31st October, 1871		9,592	42			
	Contingencies do as per Statement, page 17		4,779	00			
	<i>Libraries, Apparatus and Prizes</i>			14,372	02		
				30,886	59		
	<i>Depository.</i>						
	Salaries to 31st October, 1871		2,836	22			
	Contingencies do as per Statement, page 17		820	92			
	<i>Superannuated Teachers</i>			3,656	54		
	<i>Museum</i>			6,055	88		
				1,412	94		
	<i>Journal of Education</i>			1,668	73		
	<i>High School Inspection</i>			2,333	31		
	<i>Public School Inspection</i>			4,218	75		

<i>Education Office.</i>			
Salaries to 31st. October, 1871 ..	10,010 64	12,829 62	318,749 54
Contingencies do as per Statement, page 18 ..	2,818 98	600 00	
<i>Preparing Public School Teachers' Examination Papers ..</i>			
<i>MISCELLANEOUS.</i>			
On account of this service ..			36,435 89
<i>MUNICIPALITIES' FUND.</i>			
On account of this service ..			62,891 50
<i>LAND IMPROVEMENT FUND.</i>			
On account of this service ..			94,258 43
<i>CHARGES ON REVENUE.</i>			
<i>Miscellaneous ..</i>		409 46	
<i>Crown Lands Expenditure.</i>			
Board of Surveyors ..	112 20		
Agents' salaries, &c.	22,700 09		
Refunds ..	19,160 68		
Surveys ..	17,000 00	58,972 97	
Boundary Survey Line ..		400 00	59,782 43
<i>COLONIZATION ROADS.</i>			
On account of this service ..			48,000 00
<i>STATIONERY OFFICE ..</i>			
<i>DEPARTMENTAL CONTINGENCIES.</i>			
Balance of accountable warrant unexpended ..			465 37
			1,555,096 51

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, October 31st, 1871.

No. 5.

STATEMENT shewing the details of Contingencies referred to in the annexed Statement of the Expenditures of the Province of Ontario, for the ten months ending 31st October, 1871.

TO WHOM PAID.	S E R V I C E.			
	\$	cts.	\$	cts.
<i>Lieutenant-Governor's Office.</i>				
Jos. Lesslie	43	83		
Montreal Telegraph Co.	27	62		
Hunter, Rose & Co.			71	45
John Notman			23	97
John Lovell	33	72		
John Lovell	24	00		
James Bain	7	50		
Copp, Clark & Co	30	09		
Sundry newspapers			95	31
N. L. Piper & Son	1	00	32	20
James Adams	16	40		
Col. Dennis			17	40
Sundry persons	28	75		
Travelling expenses	3	50		
Cab hire			32	25
<i>Executive Council Office and Attorney-General's Office.</i>				
Jos. Lesslie	193	71		
Montreal Telegraph Co.	303	29		
Donnison	154	02	651	02
Hunter, Rose & Co.			135	32
John Notman				
J. Rordans	98	88		
Adams, Stevenson & Co.	127	50		
S. Hackett	9	60		
Copp, Clark & Co.	39	00		
Brown Bros	14	40		
John Lovell	9	75		
John Lowe & Co.	24	00		
Robertson & Cook	0	75		
Meehan & Doust	2	00		
Sundries	2	85		
			328	73

John Edwards.....	Stationery	38 05			
J. M. Trott.....	Books	24 00	283 75		
Sundry newspapers.....	Subscription and advertising.....		72 72		
A. McDonell.....	Hemming towels	1 20			
Wm. Edwards.....	Sundries	5 15	6 35		
Express Co.	Charges		10 05		
Sundry persons.....	Cab hire	33 00			
Prof. Buckland	Travelling expenses.....	39 50			
F. T. Jones.....	do	28 15			
John Davies.....	do	10 00	110 65		
do	Services as extra clerk.....	399 98			
R. L. Brydges.....	do	175 50			
John Steel.....	do	15 00			
H. N. Eldis.....	do	8 00			
A. McDonell	do	5 00	603 48		1,881 00
<i>Crocea Lands Department.</i>					
J. Morphy	Postage	300 00			
Montreal Telegraph Co.....	Telegrams	65 31			
Dominion	do	0 98			
Hunter, Rose & Co ".....	Printing	928 97			
Jno. Notman	Stationery	2 00			
Jno. Lowe & Co.....	Year Books.....	46 00			
Copp, Clarke & Co.....	Maps, &c.....	24 00			
Jno. Lovell	Dominion Directories	8 00			
Robertson & Cook	Toronto	6 36			
H. Rowsell	Law Reports	5 00			
Jno. Jacobs	Pens	1 25			
Chas. Potter	do				
Sundry Newspapers	Subscription and advertising.....		1,021 58		
Metropolitan Water Co	Water	86 25	416 76		
W. J. Lewis	Ice	12 00			
Geo. Chaffey & Bro	Fuel	17 60			
T. C. Chisholm.....	do	517 50			
Jno. Boxall	Tinsmithing	223 14			
Thos. Lalor	Locksmithing	47 25			
T. Bryan	do	6 15			
Geo. Harding	Plumbing.....	5 55			
Robert Bell	Painting	117 32			
D. Grant	Carpenter work.....	76 00			
J. B. Smith.....	Lumber	36 89			
R. Hay & Co	Furniture	48 50			
<i>Carried forward</i>		560 80	3,526 53		12,324 04

Contingencies—Continued.

TO WHOM PAID.	S E R V I C E.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>			3,526	53		12,324 04
	<i>Crown Lands Department—Continued.</i>						
H. Piper	Tinware		560	80			
P. Paterson & Son	Hardware			6	00		
A. McCormick	Repairing grates, &c.			63	23		
J. O'Malley	do matting			68	00		
Wm. Townsend	do do			5	00		
B. Walton	Line, &c.			30	45		
Hugh Miller	Paints			17	00		
Sundry persons	Repairs			6	75		
				14	65		
J. Bradshaw	Office cleaning, &c.			771	88		
W. R. Roberts	Street watering			274	28		
	Expenses			13	00		
H. G. Gillespie	Law costs			37	50		
P. McGregor	Registering deeds, &c			275	53		
Hon. S. Richards	Protest			10	00		
Bank of Montreal				1	53		
Express Co.	Charges			324	56		
P. Alma	Services as extra clerk			1	20		
W. H. Bell	do			388	00		
J. Sale	do			180	00		
W. Revell	do			176	00		
R. Burroughes	Services as fireman			60	00		
				304	00		
	<i>Auditor's Office.</i>			1,108	00		6,019 5
Jno. Notman	Stationery				9	93	
Jno. Lowe & Co	Year Books				0	75	10 68
	<i>Queen's Printer's Office.</i>						
Jos. Lesslie	Postage			55	19		
Hunter, Rose & Co	Printing			3	11		
Jno. Notman	Stationery			11	78		70 08
	<i>Legislation.</i>						
Montreal Telegraph Co.	Telegrams			24	55		

Sundry newspapers.....	Subscription and advertising.....	15 00	92 40
Metropolitan Water Co	Water	8 80	
Geo. Chaffey & Bros	Fuel	110 40	
T. C. Chisholm	do	41 31	
Consumers' Gas Co.	Gas	15 95	
to Fulton, Michie & Co.	Candles		191 46
Robert Wilkes	Calendar clock	35 00	
M. Smith	Sundries	31 92	
W. B. Malcolm	Rubber hose	23 24	
John Boxall	Tinsmithing	5 45	
Cunning & Wells	Repairs	2 81	
A. McDonell	Travelling expenses	8 00	8 26
Henry Kinloch	do	126 00	
Hon. J. S. Macdonald	do	43 00	
G. D. Boulton	Office rent		177 00
			225 00
			1,899 35
<i>Treasury Department.</i>			
Sundry persons.....	Postage stamps.....	161 40	
to Montreal Telegraph Co.....	Telegrams	138 62	
to Dominion	do	3 80	
			303 92
Hunter, Rose & Co.	Printing		287 60
John Notman	Stationery	154 01	
J. T. Rolph	Bank cheques.....	80 00	
John Lovell	Dominion Directories	24 00	
John Lowe & Co.	Year Books.....	0 75	
Henry Rowsell	Books	2 00	
Robertson & Cook	City Directory	2 00	
			262 76
Sundry newspapers	Subscription and advertising.....	65 23	
A. McDonell	Cleaning, &c	6 70	
Jacques & Hay	Book-case	30 00	
J. Robinson & Co.	Ice pichers.....	10 00	
R. Jordan	Whisks	1 45	
Rice Lewis & Son	Cash box.....	4 00	
			52 15
Express Co.	Charges	7 80	
Sundry persons	Cab fare	40 44	
Hon. E. B. Wood	Travelling expenses	40 00	
John Little	Services as extra clerk.....		88 24
			131 25
			1,191 15
			3,363 08
	<i>Carried forward</i>		

Contingencies—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.
	<i>Brought forward</i>			3,363	08
	<i>Secretary and Registrar's Department.</i>				
Jos. Lesslie	Postage	180	85		
Montreal Telegraph Co.	Telegrams	36	56		
Dominion	do	15	34		
Hunter, Rose & Co.	Printing			232	75
John Notman	Stationery	164	08	264	48
John Lovell	Dominion Directories	24	00		
John Lowe & Co.	Year Books	0	75		
Robertson & Cook	Toronto Directories	4	00		
Sundry newspapers.	Subscription and advertising			192	83
A. McDonell	Hemming towels	60	20		
Express Co.	Charges	1	20		
T. C. Patteson	Travelling expenses	0	50		
J. Alley	Services as extra clerk	23	40		
				108	00
	<i>Registrar-General's Office.</i>			883	36
Jos. Lesslie	Postage			90	43
Hunter, Rose & Co.	Printing, binding, &c	2,161	65		
John Notman	Stationery			11	10
H. S. Crewe	Boxes	12	50		
Sundry persons	Brushes	4	15		
Express Co.	Charges			16	65
Hon. E. B. Wood	To pay District Registrars.			74	15
				3,842	62
	<i>Department of Agriculture and Public Works.</i>				
Jos. Lesslie	Postage	229	17		
Montreal Telegraph Co.	Telegrams	258	95		
Dominion	do	4	24		
Hunter, Rose & Co.	Printing			492	36
John Notman	Stationery	193	70		
John Lovell	Dominion Directories	24	00		
Robertson & Cook	Toronto do	4	00	301	64

Brinaston & Bro	Sundry repairs	19 15	1,156 98
Jacques & Hay	Furniture	120 21	
Wm. H. Sparrow	Furnishings	121 33	
James Fleming	do	16 43	
F. W. Coate	Garden chairs	11 60	
James Forsyth	Trees, flowers, &c.	180 95	450 54
P. Paterson & Sons	Hardware	4 35	
Jno. B. Smith	Lumber	5 08	
E. M. Morphy	Clocks	140 00	
R. A. Wood	Chemicals	20 35	
R. S. Williams & Co.	Piano hire	6 00	
Bolt, Rennie	Clearing snow	40 00	176 38
Jno. Murphy	Cleaning rifles	10 50	50 50
Express Co	Charges		2 80
	<i>Depository.</i>		4,779 60
Jos. Lesslie	Postage		189 35
Hunter, Rose & Co	Printing		105 84
Jno. Taylor & Bros	Stationery		19 35
E. J. Potter	do		87 80
Geo. Chaffey & Bro	Fuel	16 00	
J. Saarr	do	62 00	
Jno. Rogers	Carpenter work		78 00
W. H. Sparrow	Hardware		277 75
Jas. Forsyth	Packing cases		18 30
J. B. Carter	Papery		10 80
Sundry persons	Telegrams, express charges, &c.		11 20
			21 92
	<i>Education Office.</i>		820 32
Jos. Lesslie	Postage	568 69	
Hunter, Rose & Co	Postage stamps	25 79	
Do	Printing		594 48
E. J. Potter	Books	89 19	1,264 46
Cobb, Clark & Co	Stationery	50 67	
Jno. Lovell	Directories	20 00	159 86
	<i>Carried forward</i>		2,018 80
			27,703 87

Contingencies—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.
	<i>Brought forward</i>			2,018	80
	<i>Education Office—Continued.</i>				
	Subscription and advertising			127	60
	Fuel	16	00		
	do	26	00		
	Carpenter work			42	00
	Furniture			224	60
	Stove-pipe			145	22
	Wood	7	55		
	.....	6	40		
	Telegrams, express charges, &c.			13	95
	.....			46	49
	Customs duties			50	00
	Law costs			150	32
				2,818	98
				30,522	85

TREASURY DEPARTMENT, ONTARIO,
TORONTO, October, 31st, 1871.

Dominion		do	3 72	28 27	390 35
Hunter, Rose & Co.	Printing Stationery	do	31 68	31 68	
Jno. Notman	Books	do	7 65	7 65	
Brown Bros	do	do	107 73	107 73	
Adam, Stevenson & Co.	Dominion Directory	do	12 00	12 00	
Jno. Lovell	Subscription and advertising	do		159 06	
Sundry Newspapers	Ice	do		535 85	
Ontario Ice Co.	Locksmithing	do	22 05	22 05	
Thos. Lator	Repairing clocks	do	17 00	17 00	
J. E. Ellis	Engraving	do	12 25	12 25	
J. T. Rolph	Engraving	do	5 00	5 00	
Owen Bros	Engraving	do		56 30	
Clevedon & Coombe	Filter, &c.	do	4 50	4 50	
C. Thompson	Soap, &c.	do	64 70	64 70	
J. G. Joseph	Sword and belt	do	45 00	45 00	
J. Stovel	Official suit for Clerk	do	92 40	92 40	
B. Saunders	Silk gown	do	60 00	60 00	
R. Scorer & Son	do	do	16 00	16 00	
Mr. Speaker	Gown for Assistant Clerk	do	50 00	50 00	
Thos. Phillips	Sundries	do	9 75	9 75	
Do	Meals to operator	do		342 35	
Express Co.	Cleaning	do	29 33	29 33	
Sundry persons	Charges	do	3 25	3 25	
Do	Cartage	do		32 58	
Do	Cab hire	do		66 75	
Court of Chancery.					
Jos. Leslie	Postage	do		91 47	
Hunter, Rose & Co.	Printing	do		186 60	
Jno. Notman	Stationery	do		183 14	
Ontario Ice Co.	Ice	do		8 00	
J. E. Ellis	Repairing clocks	do	10 00	10 00	
D. Vorston	Sundry repairs	do	29 25	29 25	
D. Sutherland	Sundries	do	47 30	47 30	
J. T. Rolph	Cancelling-stamps	do	24 00	24 00	
Richd. Graham	Stamps on proceedings	do		101 55	
M. Freeland	Copying	do	84 90	84 90	
A. L. Doyle	do	do	13 10	13 10	
W. Cumming	Extra services	do	77 00	77 00	
A. Grant	Allowance to Judge's library	do		175 00	
		do		100 00	
				1,124 16	
				21,347 23	

Contingencies—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>					21,347	23
	<i>Court of Queen's Bench.</i>						
Jos. Lesslie	Postage			111	38		
Hunter, Rose & Co	Printing			98	12		
Jno. Notman	Stationery			48	62		
Jno. Lovell	Dominion Directory			12	00		
J. T. Rolph	Stamp ribbon			1	50		
A. Aird	Crockery			3	95		
R. Jordan	Soap			2	25		
James Alexander	Sundry repairs, &c			130	20		
R. G. Dalton	Drawing Precepts			37	00		
N. C. Jarvis	Copying			60	00		
R. G. Dalton	Allowance to Judge's library					605	02
	<i>Court of Common Pleas.</i>						
Jos. Lesslie	Postage			7	22		
Jno. Notman	Stationery			44	48		
ML B. Jackson	Allowance to Judge's library			100	00		
	<i>Normal and Model Schools.</i>					151	70
Dr. Sangster	Post Office box						
Hunter, Rose & Co.	Printing			9	00		
S. F. May	Books, &c			455	65		
Sundry Newspapers	Advertising			1,932	04		
Metropolitan Water Co	Water			43	60		
Geo. Chaffey & Bro	Fuel			300	00		
J. Snarr	do			51	10		
Consumers Gas Co.	Gas			125	00		
				26	61		
Alex. Hamilton	Painting and glazing			800	00		
Geo. Harding	Plumbing			204	48		
Geo. Ringham	Transmitting			56	46		
Donald Grant	Carpenter work			12	00		
Jno. Rogers	do			64	89		

No. 6.

STATEMENT showing the Estimates for the year 1871, the amount expended by the Government of Ontario, and the amounts unexpended and overexpended to 31st October, 1871.

SERVICE.	SUB-HEAD OF SERVICE.				Appropriation. \$ cts.	Expenditure. \$ cts.	Unexpended. \$ cts.	Overexpended. \$ cts.
Civil Government	Government House	.....	.....	.....	3,987 00	3,353 30	633 70	
	Lieutenant-Governor's office, salaries	.....	.....	.....	2,245 56	1,295 46	950 10	
	Do do contingencies	.....	.....	.....	300 00	272 58	27 42	
	Executive Council Office, salaries	.....	.....	.....	1,015 00	815 60	169 40	
	Do do contingencies	.....	.....	.....	700 00	633 12	66 88	
	Attorney-General's Office, salaries	.....	.....	.....	6,624 65	5,532 93	1,091 72	
	Do do contingencies	.....	.....	.....	1,800 00	1,266 23	533 77	
	Treasury Department, salaries	.....	.....	.....	8,765 00	7,304 34	1,460 66	
	Do contingencies and repairs	.....	.....	.....	2,796 66	1,878 58	918 08	
	Secretary and Registrar's Office, salaries	.....	.....	.....	9,405 60	7,912 30	1,582 70	
	Do contingencies and repairs	.....	.....	.....	1,996 67	1,570 79	425 88	
	Registrar-General's Branch, salaries	.....	.....	.....	1,600 00	.....	1,600 00	
	Do contingencies, &c.	.....	.....	.....	6,000 00	6,136 60	403 40	
	Public Works Department, salaries	.....	.....	.....	10,365 00	8,637 31	1,727 69	
Miscellaneous	Do contingencies and repairs	.....	.....	.....	3,295 67	2,568 43	728 24	
	Crown Lands Department, salaries	.....	.....	.....	30,480 00	24,904 75	5,575 25	
	Do contingencies	.....	.....	.....	9,525 00	6,019 45	3,505 55	
	Gratuities, public officers	.....	.....	.....	7,000 00	3,200 00	3,800 00	
	Inspector of Prisons	.....	.....	.....	2,060 00	1,666 61	333 39	63 30
	Do contingencies	.....	.....	.....	650 00	713 30	.....	6 00
	Do Clerk	.....	.....	.....	400 00	406 00	.....
	Auditor's Office, salaries	.....	.....	.....	2,730 00	2,274 74	455 26	
	Do contingencies	.....	.....	.....	50 00	10 68	39 32	
	Inspector of Registry Offices	.....	.....	.....	2,000 00	1,500 00	500 00	
	Queen's Printer, salary	.....	.....	.....	1,200 00	1,000 00	200 00	
	Do contingencies	.....	.....	.....	50 00	70 08	.....	20 08
	Official Gazette	.....	.....	.....	4,500 00	2,573 77	1,926 23	
	Salaries	.....	.....	.....	10,025 00	7,420 00	2,605 00	
Legislation	Sessional writers, messengers and pages	.....	.....	.....	2,000 00	3,408 00	.....	1,408 60
	Stationery, &c.	.....	.....	.....	15,000 00	10,397 63	4,602 37	
	Printing, &c., Statutes	.....	.....	.....	2,500 00	1,873 46	626 54	
	Expenses of elections	.....	.....	.....	30,000 00	17,161 50	12,838 50	
	Carried forward	.....	.....	.....	181,697 21	133,808 14	49,327 05	1,497 98

Statement, &c.—Continued.

SERVICE.	SUB-HEAD OF SERVICE.	Appropriation.		Expenditure.		Unexpended.		Overexpended.	
		\$	cts.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>	181,697	21	133,868	14	49,327	05	1,497	98
	Contested Elections	5,000	00	1,020	29	3,979	71		
	Increase of Library.....	1,000	00	193	70	806	30		
	Indemnity to Members.....	72,319	68	33,799	08	38,520	60		
	Contingencies and repairs.....	5,850	00	4,642	14	1,207	86		
	Postages	2,500	00	2,191	73	308	27		
	Court of Chancery.....	16,766	66	15,116	69	1,649	97		
	Court of Queen's Bench	6,610	00	5,821	66	788	34		
	Court of Common Pleas	4,410	00	3,651	69	758	31		
	Court of Error and Appeal.....	10,050	00	7,537	50	2,512	50		
	Criminal Justice.....	120,000	00	80,525	57	39,474	43		
	Miscellaneous Justice.....	39,100	00	25,117	18	13,982	82		
	London Lunatic Asylum	70,144	29	66,292	78	3,851	51		
	Toronto Lunatic Asylum	32,977	17	30,297	17	2,680	00		
	Deaf and Dumb Institution.....	11,722	45	8,903	65	2,819	40		
	Asylum for the Blind	70,466	06	45,494	81	24,971	25		
	Reformatory	6,409	05	665	38	5,743	67		
	Court House and Gaol, Saint Ste. Marie	875	58	198	63	676	95		
	Lock, Rosseau River.....	16,253	87	9,673	05	6,580	82		
	Lock, Balsam Lake	15,833	13	6,669	00	9,164	13		
	Lock, Young's Point.....	439	60	192	18	247	42		
	Agricultural College and Farm	100,000	00	46,850	75	53,149	25		
	School of Industrial Science	50,000	00	36,980	52	13,019	48		
	Central Prison.....	150,000	00	680	87	149,319	13		
	Asylum for Adult Idiots	10,000	00	2,938	40	7,061	60		
	Normal and Model Schools	12,600	00	11,751	00	849	00		
	Departmental Buildings	2,500	00	1,705	40	794	60		
	Pigeon River Works.....	5,000	00	407	95	4,592	05		
	Sydenham	2,000	00	169	60	1,830	40		
	Nottawasaga do	6,000	00	786	49	5,213	51		
	Kamistiquia do	6,000	00	188	70	5,811	30		
	Portage du Fort Bridge	4,000	00			4,000	00		
	Navigation Seagov River.....	11,959	39	7,833	42	4,125	97		
	Cut, Lakes Joseph and Rosseau.....	3,205	70	2,605	75	599	95		
	Washago and Gravenhurst Road.....	8,296	57	8,377	96				
	Surveys and Drainage.....	153,628	21	55,468	23	98,159	98		
	Miscellaneous	25,300	00	6,016	22	19,283	78		
								81	39

Asylum Maintenance	Asylum for Insane, Toronto	80,110 00	57,701 96	22,348 04
	Do London	56,000 00	43,530 67	12,469 33
	Do Orillia	21 32	21 32	
	Do Rockwood	47,190 00		47,190 00
	Deaf and Dumb Asylum	19,650 00	17,613 81	2,036 19
Reformatory		21,710 00	16,480 26	5,229 74
Agriculture and Arts		75,100 00	72,407 90	2,692 10
Immigration		30,000 00	20,504 72	9,495 28
Hospitals and Charities		40,260 00	38,560 00	1,700 00
Literary and Scientific Institutions		1,350 00	1,350 00	
Education	Public and Separate Schools	175,000 00	172,369 16	2,630 84
	Poor Schools	6,000 00	2,370 00	3,630 00
	Normal School, Salaries	13,842 00	9,592 42	4,249 58
	Do Contingencies	6,040 00	4,779 60	1,260 40
	High Schools	70,000 00	65,976 00	4,024 00
	Libraries, Apparatus and Prizes	35,000 00	30,886 59	4,113 41
	Depository, Salaries	3,405 00	2,836 22	568 78
	Do Contingencies	1,710 00	820 32	889 68
	Superannuated Teachers	6,500 00	6,055 88	444 12
	Museum	3,850 00	1,412 94	2,437 06
	Journal of Education	2,390 00	1,668 73	721 27
	High School Inspection	4,000 00	2,333 31	1,666 69
	Public School Inspection	22,500 00	4,218 75	18,281 25
	Education Office, Salaries	12,013 00	9,002 36	2,002 36
	Do Contingencies	4,555 00	2,818 98	1,736 02
	Agricultural Instruction	5,000 00		5,000 00
	Collegiate Institutes	7,500 00		7,500 00
	Preparing Public School Teachers' Examination Papers		600 00	
Municipalities Fund		71,365 40	62,891 50	8,473 90
Land Improvement Fund		102,733 31	94,258 43	8,474 88
Common School Fund		187,652 96		187,652 96
Charges on Revenue	Miscellaneous	3,700 00	409 46	3,290 54
	Board of Surveyors	400 00	112 20	287 80
	Salaries of Agents, &c.	35,000 00	22,700 09	12,299 91
	Refunds	15,000 00	19,100 68	
	Surveys	50,000 00	17,000 00	33,000 00
	Claims, lands twice sold	5,000 00		5,000 00
	Inspectors valuing lands	10,000 00		10,000 00
	Boundary survey	15,000 00	400 00	14,600 00
	Carried forward	2,487,462 61	1,468,485 22	1,025,317 44
				6,340 05

Statement, etc.—*Concluded.*

SERVICE.	SUB-HEAD OF SERVICE.	Appropriation. \$ cts.	Expended. \$ cts.	Unexpended. \$ cts.	Over expended \$ cts.
	<i>Brought forward</i>	2,487,462 61	1,468,485 22	1,025,317 44	6,340 05
Colonization Roads.....	.....	60,000 00	48,000 00	12,000 00	
Miscellaneous .....	.....	34,097 46	36,435 89	.....	2,338 43
Stationery Account .....	.....	.....	1,710 03	.....
Accountable Warrants .....	.....	.....	465 37	.....
Unforeseen and unprovided .....	.....	20,000 00	.....	.....
	Tota ^l	2,601,560 67	1,555,096 51	1,037,317 44	8,678 48

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, 31st October, 1871.

PUBLIC ACCOUNTS

OF THE

PROVINCE OF ONTARIO,

FOR THE

YEAR ENDING 31ST DECEMBER,

1871.

Laid before the Legislative Assembly, by Command.

JANUARY, 1872.



Toronto:

PRINTED BY HUNTER, ROSE & CO., 86 AND 88 KING ST. WEST.

1872



To His Excellency the Honorable WILLIAM PEARCE HOWLAND, Companion of the Most Honorable Order of the Bath, Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to your Excellency the PUBLIC ACCOUNTS of the Province of Ontario, for the year ending 31st December, 1871.

Respectfully submitted.

ALEX. MACKENZIE,

Treasurer.

TREASURY DEPARTMENT, ONTARIO.

Toronto, January 22nd, 1872.

CONTENTS.

	PAGE.		PAGE.
ADMINISTRATION OF JUSTICE :—		CONTINGENCIES—Continued.	
Court of Chancery—Salaries.....	33	Crown Lands Department.....	79
Do of Queen's Bench do	34	Education Office.....	84
Do of Common Pleas do	34	Normal and Model Schools	83
Deputy Clerks of the Crown and Pleas—		Depository.....	84
Salaries	39	Court of Chancery	82
Criminal Justice, Criminal Prosecutions.	35	Do Queen's Bench.....	82
Do Administration of.....	36	Do Common Pleas.. ..	83
Do Special Services.....	38	Legislation	81
Miscellaneous Justice.....	39		
Seals and other Contingencies.. ..	41	CROWN LAND'S EXPENDITURE :—	
Repairs Osgoode Hall.. ..	42	Salaries and Expenditure of Travelling	
ARBITRATION.....	73	Agents	65
ASYLUM MAINTENANCE .—		Surveys	70
Lunatic Asylum, Toronto.....	57	Refunds	66
Details of.....	88	Inspectors' Valuing Lands.. ..	72
London Asylum.....	57	Board of Examiners, Land Surveyors.....	73
Details of.....	90	Agents' Salaries, Commission and Dis-	
Orillia Asylum	57	bursements.....	66
Details of.....	57	Boundary Survey.....	72
Deaf and Dumb Institution.....	57		
AGRICULTURE :—		COLONIZATION ROADS :—	
Electoral Division Societies, grants to...	57	Expenditure.. ..	70
Mechanics' Institute.....	59		
Agricultural Association.....	60	CHARGES ON REVENUE.....	74
Fruit Growers' Association.....	60		
Entomological Society	60	CONSOLIDATED REVENUE FUND :—	
ALGOMA TAXES :—		Statement of account on 31st Dec., 1871.	11
Statement of monies received.....	18		
BALANCES :—		EXPENDITURE :—	
Balance Sheet, 1871.....	8	Statement of	22
Unexpended	130		
Overexpended	130	EDUCATION :—	
Open accounts on 31st December, 1871...	12	Education Office—Salaries.....	61
CIVIL GOVERNMENT :—		Do Contingencies.....	84
Government House.....	22	Normal and Model School—Salaries.....	62
Lieutenant Governor's Office—Salaries...	22	Do do Contingencies.....	83
Executive Council Office do ..	23	Depository—Salaries.....	63
Attorney-General's Office do ..	23	Contingencies.....	84
Treasury Department do ..	23	Libraries, Apparatus and Prizes—Details	
Secretary and Registrar's Office do ..	24	of expenditure.....	117
Agriculture and Public Works Depart-		High School Inspection.....	63
ment—Salaries.....	25	Collegiate Institutes.....	63
Crown Lands Department—Salaries.....	25	Journal of Education.....	63
		Examination Papers.....	64
CONTINGENCIES :—		Public School Inspection.....	64
Lieutenant-Governor's Office.....	76	Public and Separate Schools.....	64
Executive Council do	76	Do do Details.....	106
Attorney-General's do	76	Poor Schools	64
Treasury Department.....	77	Do Details.....	113
Secretary and Registrar's Office.....	78	High Schools	64
Agriculture and Public Works Depart-		Do Details	105
ment.....	78	Superannuated Teachers	64
Auditor's Office.....	81	Do do Details	113
Queen's Printer.....	51	Museum and Library.....	64
		Do Details.....	118
		HOSPITALS AND CHARITIES :—	
		Aid to.....	60
		IMMIGRATION.....	55

	PAGES.		PAGES.
INVESTMENTS.....	21	PUBLIC WORKS AND BUILDINGS—Continued.	
Interest on.....	14	Asylum for Adult Idiots.....	49
JUDGES :—		Normal Schools.....	49
Of Superior Courts—Salaries.....	35	Departmental Buildings.....	49
LAW STAMPS :—		Pigeon River Works.....	52
Statement of Moneys received.....	19	Sydenham River Works.....	52
LICENSES :		Nottawasaga River Works.....	52
Statement of.....	15	Kaministiquia River Works.....	53
LITERARY AND SCIENTIFIC INSTITUTIONS :—		Registry Office and Lock-up, Parry Sound.	54
Grants to.....	61	Do. do. Thunder Bay.	54
LEGISLATION :—		Settlers' Homestead Fund.....	54
Salaries.....	27	Surveys, Inspections, &c.....	55
Repair to Buildings.....	28	Lock Masters.....	55
Indemnity to Members.....	31	REFORMATORY PRISON.....	57
Sessional Messengers, Writers and Pages.	29	Do do Details.....	90
Postages and cost of House Post Office...	30	REVENUE :—	
Stationery, including Printing Paper, &c.	30	Casual Revenue.....	16
Printing, Binding and Circulating the		Fines and Forfeitures.....	16
Statutes.....	30	Lunatic Asylums.....	8
Expenses of Election.....	31	Reformatory.....	8
Contested Elections.....	33	Education.....	8
Parliamentary Library.....	30	Dominion of Canada.....	9
Contingencies.....	81	Crown and Clergy Lands.....	8
LAW SOCIETY :—		Licenses.....	8
Account—Statement of.....	128	Consolidated Municipal Loan Fund...	8
Land Improvement Fund.....	65	Algoma Taxes.....	8
Do. do. Details of.....	122	Interest on Investments.....	8
MISCELLANEOUS.....	73	Law Stamps.....	8
Arbitration.....	73	STATIONERY :—	
Inspection of Asylums and Prisons.....	27	Account—Statement of.....	74
Provincial Auditor.....	27	Supplied the different Departments and	
Queen's Printer.....	27	Offices.....	127
Cost of Official Gazette.....	27	STATEMENT :—	
Inspection of Registry Offices.....	27	Balance Sheet—Receipts and Payments	
Gratuities.....	27	during the year.....	8
MUNICIPALITIES FUND.....	64	Consolidated Revenue Fund on 31st De-	
Do do Details.....	97	cember, 1871.....	11
MUNICIPAL LOAN FUND :—		Balances of Open Accounts on 31st De-	
Receipts.....	13	cember, 1871.....	12
MECHANICS' INSTITUTES :—		Consolidated Municipal Loan Fund—	
Grants to.....	59	Receipts.....	13
PUBLIC WORKS AND BUILDINGS :—		Interest on Investments.....	14
Deaf and Dumb Institution.....	45	Licenses.....	15
Toronto Lunatic Asylum.....	44	Casual Revenue.....	15
Asylum for the Blind.....	46	Algoma Taxes.....	18
Reformatory.....	46	Law Stamps.....	19
Lunatic Asylum, London.....	42	Education Office.....	20
Court House and Gaol, Sault Ste. Marie.	47	Investments.....	21
Improvement of Navigation, Seugog		Expenditure.....	22
River.....	51	Contingencies.....	76
Cut, Lakes Joseph and Rosseau.....	51	East Wing, repairs.....	86
Washago and Gravenhurst Road.....	51	Lunatic Asylum, Toronto.....	88
Miscellaneous.....	54	Deaf and Dumb Institution.....	92
Lock on Rosseau River.....	50	Lunatic Asylum London.....	90
Lock at Young's Point.....	47	Reformatory Prison.....	94
Navigation Balsam and Cameron Lakes.	50	Municipalities Fund Account.....	96
Survey and Drainage of Crown Lands...	53	Do do Distribution.....	97
Agricultural College and Farm.....	47	Education Expenditure details.....	105
School of Technology.....	48	Stationery supplied various Depart-	
Central Prison.....	48	ments.....	127
		Law Society.....	128
		Balances of Appropriations.....	130
		Unforeseen and Unprovided.....	129
		Comparative Statement.....	134

PUBLIC ACCOUNTS
OF THE
PROVINCE OF ONTARIO.
1871.

No. 1.

BALANCE SHEET showing the entire Receipts and Payments of the Treasurer of Ontario during the year 1871, with the Cash Balances on the 1st January and 31st December.

RECEIPTS.		\$	cts.	\$	cts.	PAYMENTS.		\$	cts.	\$	cts.
Jan. 1.	Cash Balance as per Statement No. 1 of 1870.....						CONSOLIDATED REVENUE FUND. (As per Statement No. 12.)				
	CONSOLIDATED REVENUE FUND.										
	From Grammar School Lands Sales.....	6,817	04				For Civil Government.....	114,613	89		
	From Crown Lands Sales.....	453,403	20				For Colonization Roads.....	55,409	04		
	From Woods and Forests.....	215,973	28				For Legislation.....	94,177	28		
	From Suspense Account.....	31,009	94				For Administration of Justice.....	182,621	71		
	From Municipal Loan Fund, per Statement No. 4.....	38,508	10				For Lunatic and other Asylums, maintenance.....	149,713	17		
	From Interest on Investments, per Statement No. 5.....	148,703	60				For Reformatory, Penitentiary, and other Asylums, maintenance.....	21,710	00		
	From Licenses, per Statement No. 6.....	58,558	55				For Immigration.....	29,712	56		
	From Casual Revenue, per Statement No. 7.....	23,567	20				For Agriculture and Mechanics' Institutes.....	74,927	90		
	From Alcoholic Taxes, per Statement No. 8.....	5,014	12				For Hospitals and Charities.....	40,260	00		
	From Law Stamps, per Statement No. 9.....	77,650	97				For Literary and Scientific Institutions.....	1,350	00		
	From Education Department, per Statement No. 10.....	35,450	65				For Education.....	331,306	40		
	From Reformatory, Penitentiary, and other Asylums, maintenance, per Statement No. 18.....	1,770	00				For Charges on Revenue.....	69,989	97		
	From Lunatic Asylum, Toronto, per Statement No. 15.....	15,232	96				For Miscellaneous.....	34,559	23		
	From Lunatic Asylum, London, per Statement No. 16.....	1,147	62							1,220,351	25
	From Lunatic Asylum, Rockwood.....	570	82				OPEN ACCOUNTS.				
							For Lunatic Asylum, Toronto, capital account.....	30,431	60		
							For Lunatic Asylum, London, capital account.....	71,726	08		
							For Deaf and Dumb Institute, Belleville capital account.....	12,274	33		
							For Asylum for the Blind, Brantford, capital account.....	53,784	81		
							For Reformatory, Penitentiary, and other Asylums, maintenance, capital account.....	4,489	79		
							For Court House and Gaol, Sault Ste. Marie, capital account.....	\$45	10		

From Deaf and Dumb Institution, per Statement No. 17	1,953 67			For Lock on Rosseau River, capi- tal account	15,771 94	
To amount withdrawn from special Deposit Account		1,115,331 72		For Lock at Young's point, capi- tal account	441 67	
			1,150,000 00	For Lock on Balsam and Cameron Lakes, capital account	11,382 25	
OPEN ACCOUNTS.				For Navigation Scugog River, capital account	8,719 73	
From Dominion of Canada	1,055,466 00			For Cut between Lakes Joseph and Rosseau, capital account	2,967 50	
From Municipalities' Fund	85,038 20			For Washago and Gravenhurst Road, capital account	8,474 48	
From Common School Lands	77,343 70			For Surveys and Drainage of Swamp Lands, capital account	78,200 61	
			1,217,847 90	For Navigation Kamistiquia, River, capital account	197 10	
				For Navigation Sydenham River, capital account	371 76	
				For College of Technology, capi- tal account	38,509 34	
				For Agricultural College and Farm, capital account	47,350 00	
				For Normal and Model Schools, capital account	13,613 50	
				For Asylum for Adult Idiots, capi- tal account	6,554 04	
				For Central Prison, capital ac- count	10,925 96	
				For Navigation Pigeon River, capi- tal account	1,527 40	
				For Navigation Nottawasaga River, Capital Account	1,708 82	
				For Registry Office and Lock-up, Parry Sound, capital account	1,715 20	
				For Registry Office and Lock-up, Thunder Bay, capital account	1,994 85	
				For Parliament and Departmental Buildings, capital account	1,862 38	
				For Public Works, miscellaneous	4,777 21	
					430,620 45	
					1,650,971 70	
				For Arbitration	2,669 98	
				For Stationery, office supplies for general service	82 67	
				For Municipalities' Fund, as per Statement No. 19	68,884 00	
				For Land Improvement Fund, as per Statement No. 22	94,258 43	
Carried forward			3,682,185 95	Carried forward		165,895 08
						1,816,866 78

No. 1.—BALANCE SHEET, shewing the entire Receipts and Payments of the Treasurer of Ontario, during the year 1871, with the Cash Balances on the 1st January and 31st December.—*Concluded.*

RECEIPTS.	\$	cts.	\$	cts.	PAYMENTS.	\$	cts.	\$	cts.
<i>Brought forward</i>					<i>Brought forward</i>			1,816,866	78
				3,682,185 95	OPEN ACCOUNTS— <i>Continued.</i>				
					For Investments, Special Deposits, as per Statement No. 11			1,692,333	33
					Bank of Montreal, balance of Cash Account			172,985	84
				3,682,185 95	Dec. 31.,			3,682,185	95

W. R. HARRIS,
Accountant.

A. MACKENZIE,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 2.

STATEMENT of the Consolidated Revenue Fund, including the items transferred to it, to the 31st December, 1871.

1871	—	\$ cts.	\$ cts.	1871	—	\$ cts.	\$ cts.
Dec. 31.	To Expenditure as per Statement No. 1.....		1,220,351 25	Jan. 1..	By balance as per Statement No. 2, 1870..... " receipts		3,503,217 51 1,115,331 72
	<i>To Dominion of Canada :</i>				<i>By Dominion of Canada :</i>		
	For half-year's interest on Ontario's excess of debt, January 1.....	145,833 33			By half-year's interest on Special Funds to January 1.....	74,847 13	
	For half-year's interest on Ontario's excess of debt, July 1.....	145,833 33			By half-year's interest on Special Funds to July 1.....	74,847 14	149,694 27
	<i>To Law Society of U. C. :</i>		291,666 66		<i>By Municipalities Fund :</i>		
	For allowance as an equivalent for fees.....		14,500 00		For 20 per cent. on amount collected during the year for cost of management.....		17,007 64 554 49
	<i>To Land Improvement Fund.....</i>		102,733 41		<i>By Refunds of 1871.....</i>		
	To balance carried down.....		4,390,893 21		<i>By Dominion of Canada :</i>		
					Half-year's subsidy and special payments, January 1.....	598,436 40	
					Half-year's subsidy and special payments, July 1.....	598,436 40	1,196,872 80 35,466 00
					By receipts from Marriage Licenses.....		6,020,144 43
			6,020,144 43	1872 Jan. 1..	By balance brought down.....	4,390,893 21	

W. R. HARRIS,
Accountant.A. MACKENZIE,
Treasurer.TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 3.
STATEMENT of the Balances of Open Accounts December 31st, 1871.

	cts.	%	cts.
Bank of Montreal	172,985 84		
Toronto General Hospital	4,000 00		
Special Deposits, Bank of Montreal	800,000 00		
Do Royal Canadian Bank	90,174 31		
Investment Account	2,747 805 01		
Stationery Supply Account	3,745 19		
Arbitration	18,790 25		
Public Works, Miscellaneous	5,738 31		
Lunatic Asylum, Toronto, Capital Account	184,037 66		
Government House, do	105,272 77		
Do Buildings, do	72,754 66		
Deaf and Dumb Institute, Belleville, do	90,215 11		
Survey and Drainage of Swamp Lands, do	128,176 35		
Muskoka Gaol and Registry Office, do	1,137 74		
Court House and Gaol, Algoma, do	10,685 35		
Lock, Balsam and Chumeyon Lakes, do	15,715 20		
Lunatic Asylum, London, do	304,449 78		
Lock on Rideau River, do	34,542 47		
Do at Young's Point, do	30,035 07		
Improvement of Navigation, Senegog River, Capital Account	27,760 34		
Asylum for the Blind, Brantford, do	69,318 75		
Washago and Gravenhurst Road, do	25,677 91		
Cut between Lakes Joseph and Rousseau, do	9,701 80		
Reformatory, Penetanguishene, do	12,080 74		
Improvement of Navigation, Kaministiquia River, do	137 10		
Do do Sydenham, do	374 76		
College of Technology, Toronto, do	38,509 34		
Agricultural College and Farm, do	47,350 00		
Normal and Model Schools, Toronto, do	13,613 50		
Asylum for Adult Idiots, London, do	6,554 04		
Central Prison, Toronto, do	10,925 96		
Improvement of Navigation, Pigeon River, do	1,527 40		
Parliament and Departmental Buildings, do	1,862 38		
Registry Office and Lock-up, Parry Sound, do	1,715 20		
Do do Thunder Bay, do	1,994 85		
Improvement of Navigation, Nottawasaga River, do	1,708 82		
	5,091,232 96		
			5,091,232 96

W. R. HARRIS,
Accountant.
TREASURY DEPARTMENT, ONTARIO
TORONTO, December 30th, 1871.

A. MACKENZIE,
Treasurer.

No. 4.

STATEMENT shewing the several amounts received by the Treasurer of the Province of Ontario, on account of the Consolidated Municipal Loan Fund, during the year ended 31st December, 1871.

FROM WHOM RECEIVED.	S E R V I C E .	\$ cts.	\$ cts.
Hon. A. A. Burnham	Treasurer United Counties Northumberland & Durham.	5,200 00	
A. M. Ross	do County of Huron.....	240 00	
G. T. Claris.....	do do Elgin	3,200 00	
F. Le Pan.....	do do Grey	1,280 00	
H. P. Brown.....	do do Oxford	800 00	
G. P. M. Ball	do do Lincoln	3,840 00	
R. Reid	do Township of Stanley	800 00	
C. R. Biggar	do do Brantford	8,011 60	
Jos. Johnston	do do Bertie	3,200 00	
A. W. Hann	do do Wainfleet	1,600 00	
C. Fletcher	do Town of Goderich.....	4,319 00	
R. P. Davy.....	do do Belleville	1,625 00	
County of Perth	Transferred from Municipalities Fund.....	2,543 75	
U. C. Lanark and Renfrew.	do do	1,848 75	
			38,508 10

A. MACKENZIE,
Treasurer.

W. R. HARRIS,
Accountant.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 5.

STATEMENT of Interest received on account of Investments, during the year ended 31st December, 1871.

FROM WHOM RECEIVED.	NATURE OF INVESTMENT.	\$ cts.	\$ cts.
Hon. Receiver-General.....	Twelve Months' Dividend on \$50,000, 6 per cent. Dominion Stock to 30th September	21,000 00	
	Do. Interest on \$500,000, 6 per cent. Dominion Bonds to 30th September	30,000 00	
	Do. Do. on £150,000, 5 per cent. Dominion Debentures to 1st July	36,500 00	
Bank of Montreal	Interest on \$1,950,000, 4 per cent. Special Deposits to 31st December	56,910 77	
Royal Canadian Bank	Interest on \$90,061 51, 4 per cent. Special Deposit to 30th September	2,692 83	
Municipalities' Fund.....	On account of Interest on City of Hamilton Debt transferred.....	1,600 00	148,703 60

W. R. HARRIS,

Accountant.

A. MACKENZIE,

Treasurer.

TREASURY DEPARTMENT, ONTARIO,

Toronto, December 30th, 1871.

No. 6.

REVENUE received by the Treasurer of Ontario on account of Licenses during the year 1871.

DIVISION.	ISSUER.	Tavern and Shop Licenses.	Vessel Licenses.	Total.
Algoma	John M. Hamilton	194 09		194 09
Brant	John Cameron	1,698 58		1,698 58
Bruce	William Gunn	1,178 76		1,178 76
Carleton	E. Sherwood	629 80		629 80
Durham East	F. Murphy	713 46	18 80	732 26
Do West	Robert Armour	363 48		363 48
Dundas	John P. Crysler	366 60		366 60
Essex	S. S. Macdonell	1,220 30		1,220 30
Elgin	James Stanton	410 48		410 48
Frontenac	A. S. Kirkpatrick	901 46		901 46
Glengarry	A. M. McKenzie	453 08		453 08
Grenville	W. J. Scott	779 50		779 50
Grey	William Armstrong	1,219 44		1,219 44
Haldimand	John R. Martin	975 72		975 72
Halton	W. L. P. Eager	749 18		749 18
Hamilton City	John H. Greer	3,135 84	169 20	3,305 04
Hastings	A. Diamond	1,626 20		1,626 20
Huron	Daniel Lizars	1,727 72		1,727 72
Kent	William Douglas	1,567 80		1,567 80
Lambton	Julius P. Bucke	86 48		86 48
Lanark North	John Menzies	285 76		285 76
Do South	Charles Rice	550 84		550 84
Leeds	Ormond Jones	1,060 44		1,060 44
Lennox and Addington	J. B. McGuin	546 34		546 34
Lincoln	Rolland Macdonald	1,477 68		1,477 68
London City	W. C. L. Gill	2,048 28		2,048 28
Middlesex	Charles Hutchinson	1,763 44		1,763 44
Muskoka	C. W. Lount	46 53		46 53
Niagara Town and Township	George B. Boyle	315 68		315 68
Norfolk	C. C. Rapelje	727 56		727 56
Northumberland East	G. M. Grover	295 16		295 16
Do West	William H. Eyre	577 16		577 16
Nipissing	John Doran	176 25		176 25
Ontario	H. J. Macdonald	465 66		465 66
Ottawa City	William F. Powell	2,415 80		2,415 80
Oxford	James Ingersoll	1,377 10		1,377 10
Peel	George Green	1,097 97		1,097 97
Perth	Michael Hayes	1,633 88		1,633 88
Peterborough	Thomas Fortye	1,116 72		1,116 72
Prescott	Edward T. Dartnell	283 49		283 49
Prince Edward	John P. Roblin	329 00		329 00
Renfrew	Andrew Irving	1,248 34	18 80	1,267 14
Simcoe	James R. Cotter	2,201 68	94 00	2,295 68
Stormont	Roderick McDonald	548 02		548 02
Toronto and part of York	Ogle R. Gowan	6,725 56	56 40	6,781 96
Victoria	William Grace	682 40	56 40	738 80
Waterloo	James Colquhoun	1,892 22		1,892 22
Welland	Isaac P. Willson	1,594 24		1,594 24
Wellington	Thomas Saunders	2,506 04		2,506 04
Wentworth	S. H. Ghent	1,222 00		1,222 00
York North	James J. Pearson	678 14	37 60	710 74
		57,882 35	451 20	58,333 55
Toronto	Pawnbrokers Licenses issued to—			
	Joanna May, 1 year		60 00	
	Fleming & Ward, do		60 00	
	John Kavanagh, do		60 00	
	Isaac Mintz, 9 months		45 00	
				225 00
	Total			58,558 55

W. R. HARRIS,

Accountant.

A. MACKENZIE,

Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 7.

STATEMENT of Casual Revenue received by the Treasurer of the Province of Ontario, during the year ended 31st December, 1871.

FROM WHOM RECEIVED.	S E R V I C E .	\$ cts.	\$ cts.
D. E. McIntyre	Sheriff of the Counties of Stormont, Dundas and Glen- garry, fines and forfeitures	20 90	
F. G. Dickinson	Sheriff of the Counties of Leeds and Grenville, fines and forfeitures	33 25	
O. T. Prun	Sheriff of the Counties of Lennox and Addington, fines and forfeitures	473 61	
C. P. Treadwell	Sheriff of the Counties of Prescott and Russell, fines and forfeitures	9 44	
F. W. Jarvis	Sheriff of the County of York, fines and forfeitures	527 25	
B. W. Smith	do do Simcoe, do	57 95	
R. Hobson	do do Welland, do	236 70	
G. Davidson	do do Waterloo, do	133 19	
J. Macdonald	do do Huron, do	9 50	
E. C. Thomas	do do Wentworth, do	47 50	
E. Deedes	do do Norfolk, do	19 00	
J. Smith	do do Brant, do	28 50	
R. Moderwell	do do Perth, do	190 00	
N. G. Reynolds	do do Ontario, do	33 25	
C. Munn	do do Elgin, do	38 00	
J. Mercer	do do Kent, do	19 00	
J. Morris	do do Renfrew, do	34 20	
			1,911 24
H. J. Macdonald	Clerk of Peace, Ontario, fines and forfeitures	1,000 00	
J. Canfield	do Oxford do	99 50	
W. A. Reeve	do Lennox and Addington, do	6 00	
Hy. Pilgrim	do Algoma, do	50	
Jas. Bennett	do do do	3 10	
			1,109 10
John Doran	Justice of Peace, Nipissing	7 25	
J. Edwards	do County of Peterboro'	1 00	
G. Barron	do do Wellington	35 00	
G. Pool	do Township West Tilbury	8 00	
			51 25
J. M. Savage	Registrar, Algoma—fees received by him		104 35
J. Creaser, jr.	County Attorney Unclaimed Funds in hands of Clerk 2nd Division Court Grey	9 23	
W. H. Bowlby	County Attorney Unclaimed Funds in hands of Clerk 5th Division Court Waterloo	38 06	
			47 29
John Notman	Accountant, Legislative Assembly—fees received by him for Private Bills		3,320 00
T. C. Patteson	Asst. Secretary. Fees received in Secretary's office, viz :		
	6 Queen's Bench Certificates at \$4 00	24 00	
	4 County Court do 2 50	10 00	
	3 do do 2 00	6 00	
	47 Commissions under Great Seal, 13 00	611 00	
	99 do Privy do 8 00	792 00	
	89 Judicial and Notarial Certificates, 1 00	89 00	
	1 Declaration of Companies, 4 00	4 00	
	30 do do 5 00	150 00	
	1 Charters of Incorporation, at 40 00	40 00	
	2 do do 30 00	60 00	
	18 do do 25 00	450 00	
	2 do do 20 00	40 00	
	1 Notice of New Stock, 5 00	5 00	
	On account of Notarial Certificate	50	
	do Registrar General's fee	1 00	
			2,282 50
T. C. Patteson	Deputy Registrar. Fees received in Registrar's office, viz :		
	21 Exemplifications of Patents, at \$8 25	173 25	
	95 Certified Copies of do 2 50	239 50	
	4 Certificates of do 50	2 00	
	Carried forward	414 75	8,825 73

STATEMENT of Casual Revenue received by the Treasurer of the Province of Ontario, during the year ended 31st December, 1871.—*Continued.*

FROM WHOM RECEIVED.	S E R V I C E .	\$ cts.	\$ cts.
	<i>Brought forward</i>	414 75	8,825 73
T. C. Patteson.....	1 Certificate of Charter, at 50 cts.....	50	
	13 Searches, at 25 cts.....	3 25	
			418 50
Hunter, Rose & Co	On account of <i>Gazette</i>	11,267 00	
John Notman	Queen's Printer, on account of <i>Gazette</i>	1,334 19	
			12,601 19
John Notman	Queen's Printer, on account of Statutes sold.....		1,531 80
Do	do do Journals sold.....		16 00
F. W. Coate & Co	Sale of old material, Government House		173 98
	Total		23,567 20

A. MACKENZIE,
Treasurer.

W. R. HARRIS,
Accountant.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 8.

STATEMENT shewing the several amounts received by the Treasurer of Ontario, on account of Taxes on Patented Lands in the District of Algoma, during the year ended 31st December, 1871.

FROM WHOM RECEIVED.	SERVICE.	\$ cts.	\$ cts.
John M. Hamilton.....	Collector of Taxes, Algoma District ; on account of Taxes.....	4,901 30	
Harris & Magee.....	Do	26 40	
O. Williams.....	Do	6 60	
J. J. Vickers.....	Do	29 08	
J. Langlois.....	Do	13 75	
George Ley	Do	36 99	
			5,014 12

W. R. HARRIS,
Accountant.

A. MACKENZIE,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 9.

STATEMENT of Revenue received on account of Law Stamps during year ended
31st December, 1871.

COUNTY.	DISTRIBUTOR.	Paid for Law Stamps.	Paid on account old credits.	Total.
		\$ cts.	\$ cts.	\$ cts.
Brant	G. R. Van Norman	1,435 10		
Bruce	D. W. Ross	1,431 00		
Carleton	Robert Lees	2,489 50		
Elgin	James Stanton	658 00		
Essex	S. S. Macdonell	760 60		
Frontenac	A. S. Kirkpatrick	1,330 00		
Grey	John Cæsar, jr.	1,558 20		
Haldimand	John R. Martin	617 50		
Halton	John Dewar, jr.	570 00		
Hastings	Charles L. Coleman	1,998 23		
Huron	Ira Lewis	1,852 50		
Kent	William Douglas	1,472 15		
Lambton	Julius P. Bucke	919 23		
Lanark	Charles Rice	879 70		
Do.	D. Fraser		52 00	
Lennox and Addington	W. A. Reeve	1,140 00		
Leeds and Grenville	Samuel Reynolds, jr.	1,216 95		
Lincoln	Rolland Macdonald	1,520 00		
Middlesex	Charles Hutchinson	2,959 25		
Norfolk	L. H. Hunt	888 25		
Northumberland and Durham	John D. Armour	2,018 75	100 00	
Ontario	S. H. Cochrane	1,757 50		
Oxford	Francis R. Ball	1,743 25		
Peel	George Green	1,149 50		
Perth	Michael Hayes	1,710 00		
Peterborough	Charles A. Weller	1,202 70		
Prescott and Russell	E. T. Dartnell	361 29		
Prince Edward	Philip Low	480 79		
Renfrew	H. H. Loucks	672 55		
Simcoe	Jas. R. Cotter	2,599 25		
Stormont, Dundas and Glengarry	J. B. McLennan	1,222 90		
Victoria	A. LaCourse		100 00	
Waterloo	W. H. Bowlby	1,140 00		
Welland	L. D. Raymond	632 70		
Wellington	H. W. Peterson	2,673 53		
Wentworth	S. B. Freeman	2,850 00		
York	W. W. Baldwin	28,965 60		
Do Surrogate Court	Hon. W. Cayley	522 50		
		77,398 97	252 00	77,650 97

W. R. HARRIS,
Accountant.

A. MACKENZIE,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, 30th December, 1871.

No. 10.

STATEMENT of Receipts from Education Department for the year ended 31st December, 1871.

SERVICE.	PARTICULARS.	\$	cts.	\$	cts.	\$	cts.
Normal and Model Schools.....	Fees, Pupils.....	4,921	00				
	Interest on \$1,100 Dominion Stock to 30th September, 1871	66	00			4,900	00
Depository	Sales of Maps, Apparatus, Prizes and Libraries during year					24,770	76
Superannuated Teachers	Subscriptions during year	5,309	00				
	Interest on \$2,000 Dominion Stock to 30th September, 1871	120	00			5,429	00
Journal of Education.....	Subscriptions and Advertisements					180	56
Museum	Sales of Photographs					7	94
Contingencies, Education Office.....	Postage Stamps					72	39
	Total.....						35,450 65

W. R. HARRIS,
Accountant.

A. MACKENZIE,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 11.

STATEMENT of Investments made during the year ended 31st December, 1871.

To WHOM PAID.	NATURE OF INVESTMENT.	Amount.	Total Amount.
		\$ cts.	\$ cts.
Hon. Receiver General.....	For the purchase of £250,000 five per cent. bonds of the Dominion of Canada, at 98 per cent.....	1,192,333 33	1,692,353 33
Bank of Montreal.....	Special deposit bearing interest at 4 per cent.....	500,000 00	
	Amount of investments made in 1868.....	2,747,805 01	
	do 1869.....		
	do 1871.....		
	Amount of special deposits made in 1869.....		
	do 1870.....		
	do 1871.....		
	Less amount withdrawn in 1871.....	890,174 31	3,637,979 32

W. R. HARRIS,
Accountant.

A. MACKENZIE,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

STATEMENT of the Expenditure made by the Provincial Treasurer on account of the Province of Ontario, during the year ended 31st December, 1871.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.
	GOVERNMENT HOUSE.				
Metropolitan Water Co.	Water supply	265	00		
Consumers' Gas Co.	do	457	77		
Geo. Chaffey & Bro.	Fuel	1,223	06		
P. Burns	do	682	20		
T. C. Chisholm	do	257	66		
Wm. Myles	do	45	50		
Jas. Young	Services as gardener	372	00		
P. Yeats	do caretaker	120	00		
D. Hossack	do	245	00		
L. Glynn	Clearing snow	55	00		
Geo. Harding	Plumbing	223	73		
Cuning & Wells	Gas-fitting	21	13		
Robt. Bell	Glazing	130	02		
A. McCormick	Brickwork	139	50		
Grant & Yorke	Repairs	12	00		
Jacques & Hay	do	4	65		
Jno. B. Smith	Lumber	12	53		
Donald Grant	Carpenter work	10	00		
P. Paterson & Son	Hardware	5	25		
W. Rennie	Lawn-movers	39	00		
N. L. Piper & Son	Stoves	62	00		
Plant & Warwood	Sewer-pipe	12	75		
Jas. Farquhar	Lime	6	45		
Jas. Fleming	Plants and seeds	56	76		
Geo. Leslie & Son	do	25	40		
A. Little	Cartage	3	75		
Wm. Edwards	Advertising	15	00		
				4,503	17
	LIEUTENANT-GOVERNOR'S OFFICE.				
	Salaries.				
E. G. Curtis	Twelve months' salary as Private Secretary to 31st December, 1871	800	00		
J. S. Dennis	Three months' salary as Clerk to 31st December, 1871, at \$1,000 per annum	249	99		

Do	Arrears, 1870	45 56	
	Twelve months' salary, Messenger, to 31st December, 1871	399 98	
	<i>Contingencies.</i>		
	For the year ended 31st December, 1871, as per Statement No. 13.	1,495 53	1,801 33
	ATTORNEY-GENERAL'S OFFICE.		
	<i>Salaries.</i>		
Hon. J. S. Macdonald	Twelve months' salary as Attorney-General to 31st December, 1871	4,000 00	
Jas. G. Scott	do Chief Clerk, do	1,600 00	
Do	Arrears, 1870	74 65	
H. Kinloch	Twelve months' salary as Second Clerk to 31st December, 1871	700 00	
A. McDonell	do Messenger do	250 00	
	<i>Contingencies.</i>		
	For the year ended 31st December, 1871, as per Statement No. 13	6,624 65	
	EXECUTIVE COUNCIL OFFICE.		
	<i>Salaries.</i>		
Jas. G. Scott	Twelve months' salary as Clerk to 31st December, 1871	400 00	
A. McDonell	do Messenger do	250 00	
M. J. Smith	do Caretaker do	365 00	
	<i>Contingencies.</i>		
	For the year ended 31st December, 1871, as per Statement No. 13	1,015 00	
	TREASURY DEPARTMENT.		
	<i>Salaries.</i>		
Hon. E. B. Wood	Twelve months' salary as Treasurer to 31st December, 1871	3,200 00	
Geo. Mathews	do Chief Clerk do	1,200 00	
W. R. Harris	do Accountant do	1,200 00	
Chas. H. Sproule	do Book-keeper, Audit Branch, to 31st December, 1871	1,900 00	
James Ross	do Law Stamp and License Clerk do	1,200 00	
R. M. Willson	do Clerk of Correspondence do	700 00	
P. Silmsker	do Messenger do	365 00	
	<i>Contingencies.</i>		
	For the year ended 31st December, 1871, as per Statement No. 13	8,765 00	
	<i>Repairs.</i>		
	For the year ended 31st December, 1871, as per Statement No. 14	1,319 15	
	<i>Carried forward.</i>	934 09	11,018 24
			27,564 71

Civil Government.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.
	<i>Brought forward</i>			27,564	71
	SECRETARY AND REGISTRAR'S DEPARTMENT.				
	<i>Salaries.</i>				
Hon. M. C. Cameron.....	Seven months' salary as Secretary and Registrar to 31st July, 1871, at \$3,200 per annum.	1,866	66		
Hon. S. Richards.....	Five months' do do do to 31st December, 1871.	1,333	34		
T. C. Patteson.....	Twelve months' salary as Assistant Secretary and Deputy Registrar, to 31st Dec., 1871	2,000	00		
J. R. Eckart.....	First Clerk to 31st December, 1871.	900	00		
J. F. C. Usher.....	Clerk do do	900	00		
H. S. Crewe.....	do do do	730	00		
Henry Alley.....	do do do	500	00		
Geo. Hobbs.....	do do do	500	00		
N. J. A. W. Innes.....	do do do	400	00		
A. Burtchall.....	Messenger do	365	00		
		9,495	00		
	REGISTRAR GENERAL'S BRANCH.				
Chas. Heron.....	Services at \$2.00 per day.			132	00
J. Ridley.....	do 1.50 do			75	00
A. Deacon.....	do do do			75	00
S. Robjohns.....	do do do			75	00
D. C. Delhoste.....	do do do			72	50
M. Drummond.....	do do do			72	00
J. Scott.....	do do do			72	00
F. Warwick.....	do do do			69	00
Wm. Skinner.....	do do do			57	00
J. M. Delanere.....	do do do			48	00
T. W. Leggo.....	do do do			42	00
E. Thompson.....	do do do			15	00
M. Merigold.....	do do do			1	50
T. C. Patteson.....	Accountable Warrant to pay Clerks			500	00
Hon. E. B. Wood.....	To pay salaries of District Registrars for 1871.			3,700	00
H. S. Crewe.....	To pay disbursements of District Registrars for 1870.			142	62
Do.....	Sundries			40	65
Jos. Lesslie.....	Postage.			109	60
Hunter, Rose & Co.....	Printing, binding, &c.			2,161	65
John Notman.....	Stationery			14	20

John Hogg	Map	7 00		
W. A. Lee	Carpenter work	86 00		
Dr. Spragg	Classification of "Causes of Death"	10 00		
Express Co.	Charges	75 40		
	<i>Contingencies.</i>		7,653 12	
	For the year ended 31st December, 1871, as per Statement No. 13		1,093 90	
	<i>Repairs.</i>			
	For the year ended 31st December, 1871, as per Statement No. 14		934 08	19,176 10
	DEPARTMENT OF AGRICULTURE AND PUBLIC WORKS.			
	<i>Salaries.</i>			
Hon. John Carling	Twelve months' salary as Commissioner of Agriculture and Public Works to 31st December, 1871		3,200 00	
Kivas Tully	Twelve months' salary as Architect and Engineer to 31st December, 1871		2,200 00	
T. N. Molesworth	do do Assistant Engineer		1,600 00	
Wm. Edwards	do do Secretary of Public Works		1,200 00	
Geo. Backland	do do Secretary of Agriculture and Arts		800 00	
Co F. T. Jones	do do Accountant		1,000 00	
Wm. Jonkison	do do Messenger		365 00	
	<i>Contingencies.</i>		10,365 00	
	For the year ended 31st December, 1871, as per Statement No. 13		2,562 41	
	<i>Repairs.</i>			
	For the year ended 31st December, 1871, as per Statement No. 14		934 08	13,861 49
	CROWN LANDS DEPARTMENT.			
	<i>Salaries.</i>			
Hon. S. Richards	Seven months' salary as Commissioner of Crown Lands to 31st July, 1871, at \$3,200 per annum		1,866 66	
Hon. M. C. Cameron	Five months' salary as Commissioner of Crown Lands to 31st December, 1871, at \$3,200 per annum		1,333 34	
Thos. H. Johnson	Twelve months' salary as Assistant Commissioner of Crown Lands to 31st December, 1871		2,600 00	
J. M. Currie	Twelve months' salary as Clerk to 31st December, 1871		1,400 00	
	<i>Carried forward</i>		7,200 00	60,602 30

Civil Government—Concluded.—Legislation.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward.</i>			60,602	30		
	CROWN LANDS DEPARTMENT. — <i>Continued.</i>						
	<i>Free Grants and Sales Branch.</i>						
J. C. Tarbutt	Twelve months' salary as Chief Clerk to 31st December, 1871	1,800	00				
A. Kirkwood	do do do	1,500	00				
J. M. Grant	do do do	1,100	00				
R. H. Browne	do do do	900	00				
	<i>Surveys, Patents and Roads Branch.</i>						
Thos. Devine	Twelve months' salary as Chief Clerk to 31st December, 1871	1,800	00				
E. Fox	do do do	1,280	00				
G. B. Kirkpatrick	do do do	900	00				
A. Clarke	do do do	113	13				
H. J. Jones	Chief Clerk Patents do	1,400	00				
A. J. Taylor	Clerk do	700	00				
P. Alma	do do	291	67				
J. Innes	do do	900	00				
	<i>Woods and Forests Branch.</i>						
J. C. Miller	Twelve months' salary as Chief Clerk to 31st December, 1871	1,600	00				
G. B. Cowper	do do do	1,400	00				
H. G. Langlais	Clerk do	600	00				
E. G. Kirby	do do do	450	00				
	<i>Accounts Branch.</i>						
Wm. Ford	Twelve months salary as Accountant to 31st December, 1871	1,800	00				
D. G. B. Ross	do do do	900	00				
Jas. Scott	Clerk do	900	00				
J. Morphy	Registrar do	1,400	00				
J. Bradshaw	Caretaker do	500	00				
A. McDonald	Messenger do	450	00				
	<i>Contingencies and Repairs.</i>						
	For the year ended 31st December, 1871, as per Statement No. 13.	29,884	80				
		8,454	00				
				38,338	80		

MISCELLANEOUS.				
<i>Gratuities.</i>				
J. Ardagh.....	Amount allowed him on retiring from Office of Superintendent, Orillia Lunatic Asylum	2,000 00		
A. J. Taylor.....	do Crown Lands Department.....	1,200 00		
<i>Inspector of Prisons.</i>				
J. W. Langmuir.....	Twelve months' salary to 31st December, 1871.....	2,000 00		
Do.....	Travelling expenses, stationery, telegrams, &c.....	715 35		
W. P. Band.....	Service as Clerk.....	355 00		
Jas. Fairfield.....	do.....	118 50		
D. Forbes.....	do.....	10 50		
<i>Provincial Auditor.</i>				
Hon. Wm. Cayley.....	Twelve months salary to 31st December, 1871.....	2,000 00		
W. R. Nursey.....	do as Clerk to 31st December, 1871.....	730 00		
	Contingencies for the year ended 31st December, 1871, as per Statement No. 13.....	11 18		
<i>Inspector of Registry Offices.</i>				
Hon. Sidney Smith.....	Twelve months' salary to 31st December, 1871.....	2,000 00		
<i>Queen's Printer.</i>				
Jno. Notman.....	Twelve months' salary to 31st December, 1871.....	1,200 00		
	Contingencies for the year ended 31st December, 1871, as per Statement No. 13.....	72 17		
<i>Official Gazette.</i>				
Hunter, Rose & Co.....	Printing.....	3,259 99	15,672 89	
LEGISLATION.				
<i>Salaries.</i>				
C. T. Gillmor.....	Twelve months' salary as Clerk of the House, to 31st December, 1871.....	1,400 00		
Jas. J. Vance.....	do Assistant.....	1,200 00		
A. Leith.....	do Law Clerk.....	1,000 00		
R. G. Dalton.....	Clerk of Contested Elections, to 31st December, 1871, at \$1000 per annum.....	1,000 00		
A. H. Sydere.....	Twelve months' salary as Clerk of Routine and Records, to 31st December, 1871.....	700 00		
S. J. Vankoughnet.....	do Clerk of the Crown in Chancery.....	400 00		
Jno. Notman.....	do Accountant of the House.....	200 00		
Do.....	Arrears, 1870.....	200 00		
Thos. Phillips.....	Twelve months' salary as Chief Messenger, to 31st December, 1871.....	500 00		
<i>Carried forward.....</i>		6,000 00		
				114,613 99

Legislation.—Continued.

TO WHOM PAID.	S E R V I C E.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>	6,000 00				114,613 99	
	LEGISLATION.—Continued.						
	<i>Salaries.—Continued.</i>						
D. Byrne	Twelve months' salary as Messenger, to 31st December, 1871	365 00					
W. Johnson	do do	365 00					
J. Bowman	do do	365 00					
C. A. McDonald	Fireman	365 00					
Jas. Wells	do do	365 00					
F. J. Glackmeyer	Night Watchman	365 00					
	On account salary as Sergeant-at-Arms	300 00					
				8,725 00			
	<i>Contingencies.</i>						
	For twelve months' ending 31st December, 1871, as per Statement No. 13			2,992 33			
	<i>Repairs to Buildings.</i>						
T. C. Chisholm	Fuel	358 72					
P. Burns	do	583 05					
Consumers' Gas Co.	Gas Supply	1,066 98					
Metropolitan Water Co.	Water Supply	333 33					
Geo. Harding	Plumbing and Gas Fitting	366 65					
Jno. Boxall	Tinsmithing	365 25					
Robt. Bell	Painting and Glazing	127 39					
T. Lalor	Bell-hanging	2 50					
Donald Grant	Carpenter Work	118 00					
A. McCormick	do	80 75					
Jacques & Hay	Repairs and Furnishings	188 90					
D. Forbes	Repairing Roof	29 00					
W. Rennie	do	15 00					
M. Anderson	Whitewashing	23 00					
Sundry persons	Clearing Snow, &c.	73 90					
Do	Chimney Sweeping	5 60					
W. R. Roberts	Street Watering	14 00					
Jno. B. Smith	Lumber	110 23					
Jas. E. Ellis	Clock Repairs	5 00					
P. Paterson & Son	Hardware	46 47					
D. Kennedy	Ladder	16 95					
Glover Harrison	Toilet Set	2 50					

Hy. Graham & Co	Matting	136 90
Sundry persons	Repairing do	7 80
H. J. Rutan	Heaters	332 25
Hugh Miller & Co	Paints, Oil, &c	38 35
Jas. Farquhar	Cement	8 50
Jas. Wraywood	Sewer Pipe	12 50
Jno. Edwards	Sundries	30 05
Wm. Edwards	To pay for advertising	20 00
<i>Sessional Writers, Messengers and Pages.</i>		4,514 82
A. Leith	Services re Municipal Act	824 00
W. R. Harris	do Public Account Committee	100 00
G. C. Holland	Reporting	140 00
Robt. Esson	Services as extra clerk at \$2 00 per diem	110 00
R. A. Kent	do	214 50
C. C. Robinson	do	86 00
F. J. Joseph	do	158 00
J. M. Delamere	do	212 00
A. M. Fraser	do	144 00
E. Stevenson	do	173 00
E. H. Thompson	do	116 00
S. Watson	do	60 00
W. Falloon	do	20 00
W. Skinner	do	20 00
C. J. McLennan	Services as Messenger at \$1 25 per diem	87 75
Wm. Kennedy	do	92 75
R. Leitch	do	93 50
Thos. Harrington	do	82 50
Wm. Purdy	do	75 00
J. Little	do	81 25
F. Clarke	do	108 75
W. G. Muman	do	46 25
P. Walsh	do	56 00
H. Thompson	do	68 75
Edwd. Sait	do	46 25
Jno. Bowman	do	35 50
R. Armour	do	28 00
Jno. McCulla	do	60 00
R. Burroughes	do	25 00
W. Fahy	do	25 00
H. Lyons	do	15 00
W. Mathews	do	25 00
J. McDonell	do	20 00
Thos. Ross	Services as Fireman at \$1 25 per diem	56 25
D. Kinnaird	do	128 00
J. Malloy	do	23 75
J. Murphy	do	10 00
J. Foley	do	39 00
<i>Carried forward</i>		3,706 75
		16,231 85
		114,613 99

Legislation.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	cts.
	<i>Brought forward.....</i>	3,706	75	16,231	85	114,613 99
	<i>Sessional Writers, Messengers and Pages.—Continued.</i>					
M. W. Hurd	Services as Page at 75 cents per diem.....	73	25			
Jno. McDonnell	do	38	25			
J. B. Fleming	do	48	25			
J. C. O'Reilly	do	43	25			
T. B. O'Reilly	do	10	00			
T. Phillips	Cleaning	132	60			
M. Hickey	do	54	00			
M. Beard	do	23	00			
M. McNulty	do	40	00			
M. Burchall	do	26	00			
M. Kaman	do	17	50	4,212	85	
	<i>Postages and Cost of House P. O.</i>					
Jos. Leslie	Postage	1,396	94			
Hunter, Rose & Co.	Postage Stamps	45	00			
Jno. Buckley	Carrying Mails	316	00			
W. Brisbane	Services in charge of P. O.	428	00			
Thos. Gobert	Services as Assistant do	169	00			
F. Gobert	do	72	00	2,426	94	
	<i>Stationery, including Printing Paper, Printing and Binding.</i>					
Hunter, Rose & Co.	Printing, &c.	6,662	63			
Jos. Barber, Jr.	Paper	3,258	17			
Jno. Notman	Stationery, &c.	1,491	47	11,412	27	
	<i>Printing, Binding and Distributing Statutes.</i>					
Hunter, Rose & Co.	Printing and Binding	1,723	46			
Express Co.	Charges	123	57	1,847	03	
	<i>Library.</i>					
Hunter, Rose & Co.	Binding	325	70			
Adam, Stevenson & Co.	Books	27	90			
Willing & Williamson	do	75	65			

F. W. Coote & Co.....	do	32 15	731 45
Wiley & Son.....	do	227 20	
Notman & Fraser	do	14 50	
Jno. Notman	do	12 00	
Express Co.	Charges.....	16 35	
Jno. Notman	<i>Indemnity to Members.</i>		37,809 08
	To pay Indemnity to Members, including Mileage.....		
	<i>Expenses of Elections.</i>		
M. P. Roblin	Expenses as Returning Officer, Addington	253 09	
Richard Carney	do	402 52	
Alex. R. Pratt	do	290 98	
T. S. Sheuston	do	165 86	
Jno. Smith	Brant, North	230 64	
Geo. Redmond	do South	143 47	
Jno. McLay	Brockville	46 62	
Wm. Sutton	Bruce, North	306 40	
J. K. Riddall	do South	228 23	
E. Sherwood	Cardwell	234 37	
D. E. McIntyre	Carleton	28 50	
J. P. Chrysler	Coruwall	194 28	
Geo. C. Ward	Dundas	41 50	
R. Armour	do East	22 00	
Colin Munro	do West	263 00	
Jno. McKay	Elgin, East	185 76	
Jno. McEwan	do West	366 71	
Jas. Durand	Essex	39 78	
A. M. McKenzie	Frontenac	189 32	
Jos. Maughan	Glengarry	380 45	
Thos. Lunn	Grey, North	395 83	
W. J. Scott	do South	158 38	
R. Martin	Grenville, South	206 00	
G. C. McKindsay	Haldimand	267 17	
M. O'Reilly	Halton	204 16	
Wm. H. Ponton	Hamilton	187 60	
Geo. Taylor	Hastings, East	34 45	
A. F. Wood	do West	199 06	
Jas. Dixon	do North	457 98	
Jno. McDonald	Huron, North	292 81	
Jno. Mercer	do South	330 34	
Wm. Ferguson	Kent	161 89	
Jno. Menzies	Kingston	27 00	
Jas. Thompson	Lanark, North	218 88	
F. G. Dickinson	do South	195 00	
Ormond Jones	Leeds and Grenville, North	56 23	
O. T. Pruyn	do South	235 28	
	Lennox		
	<i>Carried forward</i>	7,642 14	
		74,671 47	114,613 99

Legislation—*Concluded*.—Administration of Justice.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.
	<i>Brought forward.....</i>	7,042	14	74,071	47
	<i>Expenses of Elections.—Continued.</i>				
John Powell.....	Expenses as Returning Officer, Lincoln.....	25	58		
James Flintoff.....	do Lambton.....	45	20		
William Glass.....	do London.....	176	53		
John M'Dougall.....	do Middlesex, North.....	257	77		
Edward Handy.....	do do West.....	243	77		
James Ferguson.....	do do East.....	250	62		
A. K. Schofield.....	do Monck.....	211	33		
J. A. Woodruff.....	do Niagara.....	97	55		
F. L. Walsh.....	do Norfolk, South.....	207	76		
E. Deedes.....	do do North.....	220	39		
G. M. Grover.....	do Northumberland, East.....	265	13		
H. N. Waddell.....	do do West.....	200	91		
J. H. Perry.....	do Ontario, North.....	288	16		
N. G. Reynolds.....	do do South.....	226	00		
A. Ross.....	do Oxford, North.....	36	74		
James Ingersoll.....	do do South.....	235	39		
W. F. Powell.....	do Ottawa.....	156	96		
Robert Broddy.....	do Peel.....	197	86		
William Smith.....	do Perth, South.....	271	11		
R. Modewell.....	do do North.....	287	81		
H. C. Rogers.....	do Peterboro', East.....	282	19		
James Hall.....	do do West.....	137	74		
C. P. Treadwell.....	do Prescott.....	301	99		
A. Greely.....	do Prince Edward.....	298	59		
A. Irving.....	do Renfrew, South.....	195	00		
James Morris.....	do do North.....	202	48		
James Keays.....	do Russell.....	190	38		
B. W. Smith.....	do Simcoe, North.....	323	73		
George Lount.....	do do South.....	52	52		
John Copland.....	do Stormont.....	183	41		
F. W. Jarvis.....	do Toronto, East.....	380	90		
S. B. Harman.....	do do West.....	443	97		
N. Dunsford.....	do Victoria, North.....	249	72		
Neil M'Dougall.....	do do South.....	206	80		
Robert Hobson.....	do Welland.....	278	00		
H. W. Peterson.....	do Wellington, South.....	30	34		
R. Gordon.....	do do North.....	320	59		

J. Webster	do	Wellington, Centre	281 45		
George Davidson.....	do	Waterloo, North	37 85		
D. McDougall	do	do South	227 51		
John H. Greer	do	Wentworth, North	202 37		
E. C. Thomas	do	do South	181 55		
John Ridout	do	York, East	209 86		
John P. Buil	do	do West	211 28		
James J. Pearson	do	do North	264 83		
Hunter, Rose & Co.	Printing		22 99		
Hy. Rowsell	Blank Forms		3 75	17,286 66	
<i>Contested Elections.</i>					
Hon. W. B. Richards	Services re Prescott, Prince Edward and Stormont Election Petitions.		300 00		
Hon. O. Mowat	do Carleton and South Grey	do	200 00		
Hon. J. H. Hagarthy	do Glengarry	do	100 00		
Hon. S. H. Strong	do Welland and North Simcoe	do	200 00		
Hon. Thomas Galt	do North York and Monck	do	200 00		
C. P. Treadwell	Services as Sheriff re Prescott	do	85 60		
D. E. McIntyre	do Stormont and Glengarry	do	107 00		
Joseph Maughan	do South Grey	do	36 00		
F. W. Jarvis	do E. and W. Toronto, and W. York,	do	176 61		
F. Biscoe	do do Registrar re Glengarry and Brockville	do	133 50		
Rusk Harris	do Prescott, Stormont, Prince Edward, E. and W. Toronto Election Petitions	do	383 20		
C. A. Brough	do Carleton and South Grey Election Petitions	do	185 69		
E. W. Mouro	do Welland and Simcoe	do	70 10		
F. C. Draper	do North York	do	41 45	2,219 15	94,177 28
ADMINISTRATION OF JUSTICE.					
COURT OF CHANCERY.					
<i>Salaries.</i>					
John A. Boyd	Twelve months' salary as Master to 31st December, 1871.		3,000 00		
do	Arrears, 1870.		126 67		
W. M. Ross	Twelve months' salary as Taxing Officer to 31st December, 1871.		1,200 00		
John J. McDonell	do Clerk	do	999 98		
A. N. Buell	do do Accountant	do	2,240 00		
do	do do Registrar	do	1,840 00		
A. Holmsted	do do Clerk	do	1,000 00		
W. Canning	do do do	do	1,000 00		
F. Arnold	do do do	do	600 00		
W. D. Patton	do do do	do	396 67		
<i>Carried forward</i>			12,403 32		208,791 27

Administration of Justice.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>	4,722	39	39,000	95	208,791	27
	CROWN COUNSEL.—CRIMINAL PROSECUTIONS.—Continued.						
	Sheriff as Crown Counsel at Brant Spring Assizes, 1871.....						
G. A. Van Neman	do do do		12 00				
Do	do do do		12 00				
M. C. R. Beecher	do Middlesex Spring do		210 08				
Do	do do Fall do		219 53				
Do	do do do		104 00				
M. Hayes	do Perth Spring do		64 00				
Do	do do do		66 00				
Do	do do do		60 00				
W. H. Bowley	do Waterloo Spring do		20 00				
A. S. Kirkpatrick	do Frontenac do do		84 00				
Jno. Duggan	do Oxford do do		46 00				
Do	do Ontario Fall do		124 00				
Do	do Oxford do do		44 00				
C. Robinson	do Huron Spring do		32 00				
Do	do do do		12 00				
Do	do Huron Fall do		140 00				
Jno. Creaser, jr.	do Grey Spring do		132 75				
Jno. R. Martin	do Haldimand Spring do		114 30				
Do	do do Fall do		56 00				
Hy. A. Hardy	do Norfolk Spring do		202 00				
Do	do do Fall do		44 25				
Hon. Sidney Smith	do Victoria Spring do		52 25				
Do	do Northumberland and Durham Spring Assizes, 1871		12 25				
Do	do Peterboro' do do		32 00				
J. B. McLennan	do Stormont, Dundas & (Hengary do do		14 00				
G. B. L. Fellows	do Prescott and Russell do		26 00				
Jno. Dewar, jr.	do Halton Fall Assizes, 1871.....		50 00				
Jno. Bell	do Hastings Spring do		40 00				
P. Low	do Prince Edward Fall Assizes, 1871		26 00				
L. W. Ross	do Bruce do do		82 00				
L. D. Raymond	do Wexford do do		1,088 00				
Hon. J. H. Cameron	do York do do			7,989	40		
	ADMINISTRATION OF CRIMINAL JUSTICE.						
Chas. L. Biggar	Treasurer County of Brant, expenditure for December quarter, 1870, March, June and September quarters, 1871		4,339	41			

A. Sproat.....	Treasurer County of Bruce, expenditure for December quarter, 1870, March June and September quarters, 1871	1,193 91		
Z. Wilson.....	Treasurer County of Carleton, expenditure for September and December quarters, 1870, March and June quarters, 1871	2,598 91		
Geo. F. Claris	Treasurer County of Elgin, expenditure for December quarter, 1870, March, June and September quarters, 1871	3,564 57		
Thos. H. Wright	Treasurer County of Essex, expenditure for December quarter, 1870, March, June and September quarters, 1871	3,217 62		
Jno. Irvine	Treasurer County of Frontenac, expenditure for September and December quarters, 1870, March, June and September quarters, 1871	4,345 28		
F. Le Pan	Treasurer County of Grey, expenditure for December quarter, 1870, March, June and September quarters, 1871	2,990 65		
A. P. Farrell	Treasurer County of Halldmand, expenditure for March, June and September quarters, 1871	1,990 65		
F. McCallum	Treasurer County of Halton, expenditure for September and December quarters, 1870, March and June quarters, 1871	1,504 93		
F. McAnany	Treasurer County of Hastings, expenditure for December quarter, 1870, March, June and September quarters, 1871	1,456 57		
A. M. Ross	Treasurer County of Huron, expenditure for December quarter, 1870, March, June and September quarters, 1871	1,927 89		
C. G. Charteris	Treasurer County of Kent, expenditure for December quarter, 1870, March June and September quarters, 1871	3,208 78		
Hon. Alex. Vidal	Treasurer County of Lambton, expenditure for December quarter, 1870, March, June and September quarters, 1871	3,627 51		
John Fraser	Treasurer County of Lanark, expenditure for December quarter, 1870, March, June and September quarters, 1871	1,459 60		
J. L. Schofield	Treasurer Counties of Leeds and Grenville, expenditure for September and December quarters, 1870, March and June quarters, 1871	2,047 14		
E. Hooper	Treasurer Counties of Lennox and Addington, expenditures for December quarter, 1870, March, June and September quarters, 1871	1,118 40		
G. P. M. Bell	Treasurer County of Lincoln, expenditure for December quarter, 1870, March, June and September quarters, 1871	2,608 17		
Adam Murray	Treasurer County of Middlesex, expenditure for December quarter, 1870, March, June and September quarters, 1871	6,243 37		
Hy. Groff	Treasurer County of Norfolk, expenditure for December quarter, 1870, March, June and September quarters, 1871	3,256 16		
Hon. A. A. Burnham	Treasurer Counties of Northumberland and Durham, expenditure for September and December quarters 1870, March, June and September quarters, 1871	5,018 21		
Wm. Paxten, jr	Treasurer County of Ontario, expenditure for September and December quarters, 1870, March and June quarters, 1871	3,065 70		
Il. P. Brown	Treasurer County of Oxford, expenditure for December quarter, 1870, March, June and September quarters, 1871	2,122 74		
Geo. Graham	Treasurer County of Peel, expenditure for December quarter, 1870, March, June and September quarters, 1871	2,513 93		
A. Monteith	Treasurer County of Perth, expenditure for December quarter, 1870, March, June and September quarters, 1871	2,295 48		
E. Pearse	Treasurer County of Peterboro', expenditure for December quarter, 1870, March and June quarters, 1871	1,004 07		
<i>Carried forward</i>		69,539 68	47,590 35	208,791 27

Administration of Justice.—Continued.

TO WHOM PAID.	SERVICE.	\$ cts.	\$ cts.	\$ cts.
	<i>Brought forward</i>	69,539 08	47,590 35	208,791 27
	ADMINISTRATION OF CRIMINAL JUSTICE—Continued.			
J. W. Marston	Treasurer Counties of Prescott and Russell, expenditure for December quarter, 1870, March and June quarters, 1871.....	665 07		
R. J. Chapman	Treasurer County of Prince Edward, expenditure for December quarter, 1870, March and June quarters, 1871.....	723 08		
A. Irving	Treasurer County of Renfrew, expenditure for December quarter, 1870, March and June quarters, 1871.....	1,277 49		
H. R. A. Bays	Treasurer County of Simcoe, expenditure for December quarter, 1870, March and June quarters, 1871.....	3,193 41		
R. Macdonald	Treasurer Counties of Stormont, Dundas, and Glengarry, expenditure for December, 1870, March and June quarters, 1871.....	1,624 65		
S. C. Wood	Treasurer County of Victoria, expenditure for September and December quarters, 1870, March and June quarters, 1871.....	1,766 90		
Charles Stanton	Treasurer County of Waterloo, expenditure for December quarter, 1870, March, June, and September quarters, 1871.....	3,017 98		
James McGlashan	Treasurer County of Welland, expenditure for December quarter, 1870, March, June, and September quarters, 1871.....	2,064 86		
William Reynolds	Treasurer County of Wellington, expenditure for December quarter, 1870, March, June and September, 1871.....	3,350 99		
James Kirkpatrick	Treasurer County of Wentworth, expenditure for December quarter, 1870, March, June and September quarters, 1871.....	4,511 17		
John K. Macdonald	Treasurer County of York, expenditure for December quarter, 1870, Winter Assizes, March, June, and September quarters, 1871.....	8,030 29		
A. T. M'Cord	Chamberlain City of Toronto, expenditure for Gaol, December quarter, 1870, March and June quarters, 1871.....	3,188 58		
R. W. Kerr	Chamberlain City of Hamilton, expenditure for September and December quarters, 1870, March, June and September quarters, 1871.....	1,095 51	104,049 66	
	SPECIAL SERVICES.			
Rolland Macdonald	In re the Queen v Primrose	635 30		
Charles Hutchinson	do	204 84		
James Brown	do	20 00		
Christopher Robinson	Parsons & Simjison	50 00		
James Stanton	Law Society	100 00		
John Newhall	do	30 00		
P. McGregor	do	195 30		
Hon. Adam Wilson	In re Attorney-General v Rastall	200 00		
	In re Amalgamation of Practice of Superior Courts		1,435 58	

DEPUTY CLERKS OF THE CROWN AND PLEAS.			
W. Rubidge.....	Salary as Deputy Clerk of the Crown and Pleas, County of Brant, for twelve months, ending 31st December, 1871.....	do	300 00
William Gunn.....	do	Bruce	300 00
James Fraser.....	do	Carlton	400 00
T. D. Warren.....	do	Elgin	400 00
F. E. Marcon.....	do	Essex	400 00
P. O'Reilly.....	do	Frontenac	400 00
P. Inglis.....	do	Grey	400 00
R. V. Griffith.....	do	Haldimand, three months, ending 31st March, 1871.....	75 00
James Mitchell.....	do	do	34 33
James Lindsay.....	do	do	190 67
W. L. P. Eager.....	do	do	300 00
A. G. Northrup.....	do	do	400 00
Hugh Johnston.....	do	Hastings, for twelve months, ending 13th December, 1871.....	400 00
W. A. Campbell.....	do	Huron	300 00
John R. Gemmill.....	do	Kent	400 00
Charles Rice.....	do	Lambton	300 00
S. Reynolds, jun.....	do	Lanark	400 00
J. B. McGuin.....	do	Leeds and Grenville,	400 00
F. A. B. Clench.....	do	Lennox and Addington,	400 00
John M'Beth.....	do	Lincoln,	400 00
C. C. Rapalje.....	do	Middlesex,	400 00
R. D. Chatterton.....	do	Norfolk,	400 00
J. V. Ham.....	do	Northumberland and Durham,	400 00
James Canfield.....	do	Ontario,	400 00
James A. Austin.....	do	Oxford,	400 00
James McFadden.....	do	Peel,	300 00
John Twigg.....	do	Perth,	300 00
Thomas Fortye.....	do	Prince Edward,	300 00
J. W. Marston.....	do	Peterboro',	300 00
A. Thompson.....	do	Prescott and Russell,	300 00
R. McDonald.....	do	Renfrew,	300 00
J. C. Morrow.....	do	Stormont, Dundas, and Glengarry,	400 00
William Grace.....	do	Simcoe,	300 00
James Colquhoun.....	do	Victoria,	300 00
L. P. Wilson.....	do	Waterloo,	300 00
James Hough.....	do	Welland,	300 00
S. H. Ghent.....	do	Wellingtton,	300 00
		Wentworth,	400 00
			12,100 00
ADMINISTRATION OF JUSTICE IN ALGOMA, &c.			
Hon. J. H. Cameron.....	Annual Grant to Law Society for Lighting and Heating Osgoode Hall, Toronto,.....		3,000 00
Richard Carney.....	Twelve Months' Salary as Treasurer and Sheriff, to 31st December, 1871.....		1,400 00
John Doran.....	do	do	1,400 00
	Carried forward.....		5,800 00
			163,175 54
			208,791 27

Administration of Justice.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>			165,175	54	208,791	27
		5,800	00				
	ADMINISTRATION OF JUSTICE IN ALGOMA, &c.—Continued.						
J. M. Hamilton.....	Twelve months' Salary as Clerk of the Peace, Algoma, to 31st December, 1871.....	800	00				
H. J. Pilgrim.....	do do Clerk of District Court, do do do	500	00				
John M. Savage.....	do do Registrar, do do do	800	00				
C. W. Lount.....	do do Stipendiary Magistrate, Maskoka, do do do	1,000	00				
J. W. Rose.....	do do do do do do do	500	00				
D. D. VanNorman.....	do do do do do do do	692	05				
W. Rabidge.....	do do do do do do do	36	50				
Wm. Gunn.....	Deputy Clerk of the Crown and Pleas, Brant, for services as Clerk of Assize, &c., do	28	43				
James Fraser.....	do do do do do do do	111	90				
T. D. Warren.....	do do do do do do do	20	42				
F. E. Maroon.....	do do do do do do do	32	57				
P. O'Reilly.....	do do do do do do do	32	40				
P. Inglis.....	do do do do do do do	32	50				
James Mitchell.....	do do do do do do do	8	41				
W. L. P. Fager.....	do do do do do do do	24	59				
A. G. Northrup.....	do do do do do do do	32	30				
Hugh Johnston.....	do do do do do do do	46	00				
W. A. Campbell.....	do do do do do do do	48	75				
John R. Gemmill.....	do do do do do do do	36	00				
Charles Rice.....	do do do do do do do	24	52				
S. Reynolds, Junr.....	do do do do do do do	52	48				
J. B. McGuin.....	do do do do do do do	24	61				
F. A. B. Clench.....	do do do do do do do	34	25				
John McBeth.....	do do do do do do do	96	50				
G. C. Rapelje.....	do do do do do do do	36	95				
R. D. Chatterton.....	do do do do do do do	49	00				
J. V. Ham.....	do do do do do do do	32	25				
Jas. Canfield.....	do do do do do do do	40	71				
Jas. A. Austin.....	do do do do do do do	24	36				
Jas. McFadden.....	do do do do do do do	43	46				
John Twigg.....	do do do do do do do	20	38				
Thos. Fortye.....	do do do do do do do	16	65				
J. W. Marston.....	do do do do do do do	24	42				
A. Thompson.....	do do do do do do do	24	79				
R. McDonald.....	do do do do do do do	64	00				
J. C. Morrow.....	do do do do do do do	24	78				

Wm. Grace	do	Victoria,	do	28 80
Jas. Colquhoun	do	Waterloo,	do	24 35
I. P. Willson	do	Welland,	do	50 66
James Hough	do	Wellington,	do	85 20
S. H. Ghent	do	Wentworth,	do	128 55
F. W. Jarvis	Sheriff of York, services attending sittings	Court of Chancery, &c.	do	299 63
John Mercer	do	Kent,	do	79 00
Wm. Ferguson	do	Kingston,	do	63 00
James Flintoff	do	Lambton,	do	39 00
John McDonald	do	Huron,	do	36 60
A. Ross	do	Oxford,	do	51 00
Jas. A. Woodruff	do	Lincoln,	do	35 00
Geo. Taylor	do	Hastings,	do	66 30
F. G. Dickinson	do	Leeds and Grenville,	do	21 50
Wm. Glass	do	Middlesex,	do	57 20
John McEwen	do	Essex,	do	36 60
James Hall	do	Peterboro',	do	39 50
R. N. Waddell	do	Northumberland and Durham,	do	67 00
Edmund Deedes	do	Norfolk,	do	23 20
Joseph Maughan	do	Grey,	do	6 50
D. E. McIntyre	do	Stormont, Dundas and Glengarry,	do	18 00
George J. Grange	do	Wellington,	do	59 00
R. Modervell	do	Perth,	do	41 70
E. C. Thomas	do	Wentworth	do	75 00
Richard Carney	Criminal Justice expenditure, Algoma	do	do	1,869 70
John Doran	do	Nipissing	do	400 10
D. D. Van Norman	Travelling expenses	do	do	40 00
Henry Pilgrim	Four years services as D. C. C. and Pleas, Algoma	do	do	320 00
Copp, Clark & Co	Registration Books, Algoma	do	do	46 00
C. W. Lount	Constables' fees, Muskoka	do	do	255 58
Jas. Morris	Conveying Lunatics from Nipissing to Rockwood Asylum	do	do	74 26
Chas. Hutchinson	Services on removal of 6th Division Court Clerk, Middlesex	do	do	7 80
John Notman	Stationery for Stipendiary Magistrate, Parry Sound	do	do	4 00
J. Rodmans	do	Thunder Bay	do	12 50
J. M. Hamilton	Copying Registrations for Thunder Bay	do	do	160 00
M. B. Jackson	Services as Clerk of Assize, &c.	do	do	322 00
R. G. Dalton	do	do	do	196 00
Mrs. T. A. Ireland	Balance due her late husband for services as D. C. C. and Pleas	do	do	70 00
Chas. Durand	Inspecting mode of using Stamps in different Courts	do	do	200 00
SEALS AND OTHER CONTINGENCIES.				16,537 11
J. T. Rolph	Repairing Seal, Halton County Court	do	do	4 00
M. B. Jackson	Seals for Court of Common Pleas	do	do	40 00
R. G. Dalton	do	Queens Bench	do	24 00
W. A. Reeve	Seals for 1st and 6th Division Courts, Lennox and Addington	do	do	18 50
Carried forward				86 50
				181,859 15
				208,791 27

Administration of Justice.—*Concluded.*—Public Works and Buildings.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.
	<i>Brought forward</i>	181,859	15		208,791 27
	REGISTRATION BOOKS FOR MUSEOKA, PARRY SOUND AND THUNDER BAY.				
John Notman	Books supplied for Muskoka.....	208	00		
Do	do Parry Sound	128	00		
Do	do Thunder Bay	126	00		
Copp, Clarke & Co.....	do	16	00	478	00
	REPAIRS, OSGOODE HALL.				
Donald Grant	Carpenter work	84	00		
Geo. Harding	Plumbing	20	13		
Alex. Hamilton	Painting and glazing	30	98		
Jacques & Hay	Furniture	145	60		
D. J. George	Towels, &c.	3	85	284	56
	PUBLIC WORKS AND BUILDINGS.				182,621 71
	LONDON LUNATIC ASYLUM.				
Hoyt & Strickland.....	On account of contract.....	16,255	32		
John Christie	do	9,053	98		
H. M. Melville.....	do	4,745	90		
Baxter & Melville	do	4,587	50		
W. J. Lucas	do	1,252	25		
Thos. H. Tracy	Two months' Salary as Clerk of Works.....	159	00		
Wm. Pope	One month's Salary as Foreman of Works.....	77	50		
Wm. Gollop	Grading	497	54		
Edward Welsh	do	107	50		
J. M. Cousins	Constructing Well.....	55	25		
Edward Rogers	Plumbing, &c.	1,988	29		
Thomas Wastie	Painting and Glazing	86	50		
D. S. Keith	Iron fountain	293	10		
C. H. Waterous & Co	Steam engine, &c.	2,500	00		
W. Howie	Fencing	38	24		
John Stewart & Co	Repairs	24	00		
E. Leonard	Iron work	149	00		
Rice, Lewis & Son.....	Hardware	62	21		
S. Meadows	Patent reflector	200	00		
C. W. & T. L. Kempster.....	Steam apparatus	1,800	00		

Wilson & Co.	Lumber	176 55
George Moorhead	Furniture	2,218 32
Jacques & Hay	do	10,100 53
David Erskine	Planting and shrubbing	33 17
Hy. Lander	do	30 00
Beadle & Buchanan	do	872 44
John Freed	do	140 00
John Erskine	do	140 00
John Tinson & Co.	do	260 77
Welding & Belding	do	114 75
James Griffin	do	17 01
D. Campbell	do	9 50
A. Roozen	do	130 00
P. Fallon	Gravel, material, etc.	324 10
Thomas Fixter	do	1,411 30
John Wood	do	1,368 50
Edward Pratt	do	51 00
E. Mullin	do	14 00
Roger Smith	do	78 00
D. Erskine & Co.	do	314 01
George Egrott & Bro.	do	72 00
E. B. Reed	do	5 00
Rowland & Jewell	do	5 75
Smith & Chapman	do	497 21
B. Greening & Co.	do	203 52
Thos. Treblecock	do	400 00
David Hardy	Tile draining, etc.	27 00
Emery & Matron	do	790 00
A. Chapman	Shelving, fixtures, etc.	193 50
S. Chapman	do	78 00
A. McPhail	do	235 35
John Tinson & Co.	do	113 00
Peter Weston	Wire fencing	152 00
John Tinson	do	254 77
B. Greening & Co.	do	10 00
F. & J. Miller & Co.	Live Stock	38 00
Francis Courtier	do	50 50
Thomas Treblecock	do	165 00
Thomas Fixter	do	50 00
Henry Lauder	do	100 00
John Mahon	do	5 00
Charles Rae	do	2 00
Michael Barry	do	9 00
Wm. Moore	do	55 00
George Grey	Farm implements	58 85
Plummer & Pacy	do	150 37
John Christie	do	38 00
Thos. Howard	do	23 50
Joseph Hall & Co.	do	126 00
Carried forward		65,026 01
		301,412 98

Public Works and Buildings.—Continued.

TO WHOM PAID.	S E R V I C E .	\$	cts.	\$	cts.
	<i>Brought Forward</i>	65,026	01		
	LONDON LUNATIC ASYLUM.—Continued.			391,412	98
Beadle & Buchanan	Seeds.....	181	00		
McClary Manufacturing Co.....	Stove.....	33	47		
S. & A. McBride	Sturdy furnishings	465	22		
Hy. Graham & Co.....	Oil-cloth, &c	444	37		
Hy. Coumb.....	do	24	10		
B. S. Murray	Carpetting, quilts, &c.....	44	50		
Geo. Winks & Co	do	839	69		
E. B. Smith & Co	Chromos	61	50		
McCrosen & Co	Buffalo-ropes	460	90		
Otto B. Graves	Frames	40	00		
H. Davis & Son	Clock.....	61	20		
Wm. Saunders.....	Surgical instruments, &c	70	00		
Plummer & Pacy	Carts	37	50		
David Hardy	Repairing oven	10	00		
Rowland & Jewell.....	Cement.....	50	00		
A. Jessie.....	Evergreens	25	50		
Loughrey & Tackaberry	Harness	50	00		
E. A. Taylor & Co.....	Table covers	53	00		
T. Beatie & Co	Books	85	92		
Hy. Lander	Sundries	47	12		
Sundry newspapers	Advertising	76	76		
Great Western Railway Co	Freight	3	18		
Grand Trunk Railway Co	do	1,512	00		
Hy. Lander	Pay lists of men employed on grounds	279	00		
Roger Smith	Services as caretaker	38	00		
W. Robinson	Report on building	8	00		
W. R. Strickland	Services as draughtsman.....	72	00		
Thos. H. Tracy	do	20	00		
Do	Travelling expenses	30	50		
Kivas Tully	do	62	64		
Henry Lander.....	Sundries			71,726	08
	TORONTO LUNATIC ASYLUM.				
D. & J. McDonald	On account of contract.....	2,896	39		
Dickey, Neil & Co	do	1,077	54		
D. S. Keith	do	1,019	63		
Geo. Ringham.....	do	438	06		

Geo. Harding	do	455 00
Greenless, Armstrong & Bills	do	901 29
Jacques & Hay	Furniture	903 20
Hy. Graham & Co	Carpeting	489 74
A. R. McMaster & Pro	Paint	23 42
Dr. Lander	Chairs	37 60
R. W. Laird	Stoves	30 60
N. L. Piper & Son	Hardware	60 80
P. Paterson & Son	Furniture	45 25
A. Smith	Harness	86 09
Wm. Thompson	Wagon, &c	148 40
Geo. Graham	Horses	320 00
Wm. Ellis	Lumber	32 85
McDougall & Bros.	do	108 72
Balhuier & Douglas	do	74 00
Wm. Burke	Drain pipe	89 21
James Brown	Fencing	30 00
Geo. Thompson	do	30 00
Hon. Jno. Carling	Digging veil	20 00
	Ordnance lands	21,000 00
		30,451 60
BELLEVILLE DEAF AND DUMB INSTITUTE.		
C. W. & T. L. Kempster	On account of contract	3,314 15
Belleville Gas Co	Gas pipe	4,000 00
E. & J. Rogers	Steam heating apparatus	500 00
Chas. Laing	Draining	151 58
A. S. Page & Co	Lumber	73 17
Flint & Yeomans	do	32 54
P. Reber	Building oven	196 00
A. N. Fringle	Window sashes	241 15
J. H. Hamby	Glass	226 25
G. S. Tickell	Furniture	511 92
Jacques & Hay	do	238 45
Osby B. Graves	Frames	91 60
A. & T. McFee	Chairs	86 69
E. H. Fosdick & Co	Blackboards	135 81
E. B. Smith	Chairs	187 60
Geo. Ritchie & Co	Mating	53 22
Jno. Lewis	Hardware	169 45
G. Clowin	Stoves	132 03
J. Warwood	Tinware	9 00
E. Stapely	Line	2 70
Geo. Lesslie & Son	Fruit trees, &c	82 50
Thos. Jones	do	124 03
H. D. Englehardt	do	30 00
Sundry persons	Seeds, &c	17 00
Do	Implements	21 08
E. Patterson	Gravel	14 00
A. Christie	do	31 00
	Carried forward	10,691 09
		162,157 68
		391,412 98

Public Works and Buildings.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>	10,691	09	102,157	68	291,412	98
	BELLEVILLE DEAF AND DUMB INSTITUTE.—Continued.						
Jas. Orr.....	Gravel	140	94				
N. McCoy.....	do	125	94				
Wm. Henry.....	do	64	00				
W. J. Palmer.....	Pay list of men employed laying out grounds	615	21				
Wm. Jones.....	Pair horses	290	00				
A. Christie.....	One horse	90	00				
N. McArthur.....	Harness	25	00				
H. McMinch.....	Lumber wagon.....	60	00				
Grand Trunk Railway Co.	Freight.....	89	40				
W. R. Strickland.....	Services as draughtsman.....	8	00				
Kivas Tully.....	Travelling expenses	24	00				
W. J. S. Holwell.....	do	11	25				
Thos. H. Tracy.....	do	29	50				
James Price.....	do	10	00	12,274	33		
	BRANTFORD BLIND INSTITUTE.						
C. W. & T. L. Kempster.....	On account of contract	47,175	00				
Jno. Turner.....	Thirteen months' salary as clerk of works at \$3 per diem.....	1,617	60				
C. H. Watrous.....	Steam boiler, &c.	650	00				
Jno. Mann.....	Gas pipes	2,747	00				
Jno. Fraser.....	Linen sheeting	451	23				
W. R. Strickland.....	Services as draughtsman.....	147	00				
H. Martin.....	Services	15	00				
D. Forbes.....	Copying	4	00				
Kivas Tully.....	Travelling expenses	51	50				
Thos. H. Tracy.....	do	10	00				
W. Moses.....	do	24	00				
H. Englehardt.....	Pay lists of labourers and teamsters	1,300	00				
Sundry newspapers.....	Advertising.....	220	68	53,784	51		
	REFORMATORY.						
R. Pearson.....	Mason work	831	25				
Jas. Berry.....	do	160	00				
A. Rourke.....	do	22	00				

Geo. Harding	Plumbing	1,093 11	
P. Paterson & Son	Hardware	161 15	
Chas. Levey & Co.	Machinery	1,540 40	
Geo. Badger	Removing boilers from Oshila	145 38	
C. Varty	Teaming	133 09	
Wm. M. Kelly	To pay labourers, &c.	57 55	
C. W. & T. L. Kempster	Travelling expenses of men	93 20	
Kivas Tully	Travelling expenses	35 00	
Jas. McKirdy	do	13 75	
Thos. H. Tracy	do	9 00	
P. Trowern	Services	25 00	
Alex. Douglas	do	162 00	4,489 79
COURT HOUSE AND GAOL, SAULT STE. MARIE.			
Richard Carney	To pay sundry small accounts	524 88	
R. Hay & Co.	Furniture	281 47	
C. J. Bampton	Material delivered	23 75	
Kivas Tully	Travelling expenses	15 00	845 10
YOUNG'S POINT LOCK.			
Wm. Edwards	Pay lists men employed	419 67	
Kivas Tully	Travelling expenses	12 00	
T. N. Molesworth	do	10 00	441 67
AGRICULTURAL COLLEGE AND FARM.			
Thos. Botham	Lots 8 in 1st and 2nd Concessions, Etobicoke	10,053 55	
Imperial Building Society	Mortgage on	6,067 00	
James Stock	do	1,976 45	
L. Coffee	Lot 7 in 1st Concession, Etobicoke	6,050 00	
G. White	Tenant for giving up possession	450 00	
P. J. Woods	Lot 7 in 2nd Concession, Etobicoke	8,457 00	
J. Austin	Lots 6 in 1st and 2nd Concessions, Etobicoke	12,471 55	
J. Leys	Services and expenses negotiating purchase of lands	200 00	
Thos. H. Tracy	do	156 00	
W. R. Strickland	do	123 00	
W. J. S. Holwell	Services as draughtsman	73 00	
W. Banks	do	28 00	
J. W. Whitney	Map, &c.	15 00	
Walsworth & Unwin	do	6 00	
Registrar Co. York	Registering deeds	22 70	
Hunter, Rose & Co.	Printing	24 50	
G. Scovill	Law fees	5 00	
D. Forbes	Copying	11 00	
T. Phillips	Sundries	4 50	
Sundry newspapers	Advertising	654 80	
Drs. Hodgins and Machattie	Travelling expenses	165 00	
Carried forward		47,022 05	
		173,963 38	391,412 98

Public Works and Buildings.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>	47,022	05	173,993	33	391,412	98
	AGRICULTURAL COLLEGE AND FARM.—Continued.						
Kivas Tully.....	Travelling expenses.....		47 70				
Hon. Jno. Carling.....	do.....		30 00				
Wm. F. Clarke.....	do.....		90 00				
Prof. Buckland.....	do.....		32 00				
W. J. S. Holwell.....	do.....		64 00				
F. T. Jones.....	do.....		9 00				
Jos. Grand.....	do.....		11 00				
Sundry Persons.....	Cab hire.....		44 25	47,350	00		
	SCHOOL OF TECHNOLOGY.						
M. Sweetnam, President Mechan- ics' Institute, Toronto.....	Mechanics' Institute Building.....	11,193	55				
D. Buchanan, Bursar Toronto Uni- versity.....	Mortgage on do.....	19,947	53				
A. Stewart.....	do.....	4,287	14				
W. A. Lee.....	On account contract repairs.....	1,275	00				
W. Mitchell.....	Services as Clerk of Works.....	114	00				
A. McCormick.....	Brick work.....	130	85				
Jno. Davy.....	Concrete flooring.....	30	00				
Henry Martin.....	Furniture.....	454	75				
Edward G. Allen.....	Window curtains.....	9	00				
Munier, Rose & Co.....	Books.....	242	64				
Sundry Newspapers.....	Printing.....	103	81				
Charles Lindsay.....	Advertising.....	45	60				
Thos. H. Tracy.....	Registering deeds.....	8	35				
Richard Purlon.....	Services as draughtsman.....	156	00				
D. Forbes.....	do.....	155	00				
Drs. Hodgins and Macbattie.....	Copying.....	31	00				
Express Co.....	Travelling expenses.....	282	42				
	Charges.....	2	70	38,509	34		
	CENTRAL PRISON.						
John Elliott.....	On account contract.....	7,650	00				
Geo. Taylor.....	Services as Clerk of Works.....	216	00				
Wm. M. Kelly.....	Iron cell gates.....	1,560	00				

Ridout, Alkenhead & Crombie.	Iron	507 79			
H. Hennesy	Lock	10 00			
D. Forbes	Copying	22 50			
R. Purdon	Services as draughtsman	237 50			
Thos. H. Tracey	do	201 00			
Labourer	Services	2 00			
Hunter, Rose & Co.	Printing	26 88			
Express Co.	Charges	35			
Sundry Newspapers	Advertising	286 85			
Kivas Tully	Travelling expenses	23 00			
J. W. Langmuir	do	52 99			
Hon. John Carling	do	64 00			
Hon. M. C. Cameron	do	23 50			
John Davies	do	9 50			
F. T. Jones	do	8 75			
Sundry persons	Cab hire	22 75			
			10,925 96		
ASYLUM FOR ADULT IDIOTS.					
John Christie	On account contract	5,306 00			
Edward Rogers	do	550 00			
W. J. Lucas	do	485 64			
W. R. Strickland	Services as draughtsman	126 00			
D. Forbes	Copying	4 00			
Kivas Tully	Travelling expenses	14 20			
Sundry Newspapers	Advertising	68 20			
			6,554 04		
NORMAL AND MODEL SCHOOLS.					
John Elliott	On account contract	12,750 00			
James Price	Services as Clerk of Works	315 00			
Thomas H. Tracey	Services as draughtsman	237 00			
Richard Purdon	do	25 00			
D. Forbes	Copying	4 00			
Geo. Harding	Plumbing	187 60			
Cameron & Wilson	Law fees	5 00			
Sundry Newspapers	Advertising	85 40			
K. Tully	Travelling expenses	1 50			
Sundry persons	Cab hire	3 00			
			13,613 50		
DEPARTMENTAL BUILDINGS.					
Benjamin Walton	On account contract for sewer, &c.	1,350 00			
James Price	Services as Clerk of Works	42 00			
Donald Grant	Carpenter work	238 50			
R. West	Ploughing	6 00			
Peter Latham	Gardening	30 00			
J. Simser	do	42 00			
S. Breck	Repairing well	7 50			
			290,946 22		
	Carried forward	1,716 00			
					301,412 98

Public Works and Buildings.—Continued

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.
	<i>Brought forward.....</i>	1,716	00	2,094	22
	DEPARTMENTAL BUILDINGS.—Continued.				
	<i>Rosseau Lock.</i>			1,802	38
	Hardware	14	70		
	Lumber	77	08		
	Seeds	8	20		
	Advertising	46	40		
	On Account of Contract.....	9,750	00		
	do	1,700	00		
	Services as Clerk of Works	56	00		
	Pay Lists of men employed	1,378	95		
	Steam Engine	560	00		
	Use of Engine, &c.....	41	68		
	Pump and Gearing	250	00		
	Eracting Dams, &c.....	212	91		
	do	250	00		
	Iron-work for Dredge	1,097	75		
	Hardware	77	83		
	do	18	60		
	do	74	26		
	do	44	37		
	do	25	44		
	do	47	21		
	do	25	00		
	Oil, Paints, &c.....	31	70		
	To pay Sundries	33	94		
	Travelling Expenses.....	4	50		
	do	19	30		
	do	152	50		
				15,771	94
	<i>Balsam Lock.</i>				
	On Account of Contract	10,945	00		
	Services as Clerk of Works.....	231	00		
	Travelling Expenses.....	194	25		
	do	12	00		
				11,382	25

LINDSAY LOCK, SCUGOG RIVER.				
Thos. Walters.....	On Account of Contract	7,571 84		
Wm. Little	Services as Clerk of Works.....	630 00		
do	Expenses and Disbursements.....	68 85		
W. J. S. Holwell.....	do	127 91		
do	Services as Draughtsman	96 00		
T. N. Molesworth	Travelling Expenses.....	142 75		
Sundry Newspapers	Advertising	33 81		
McLennan & Co.	Rope	16 65		
Kimball & Makins	Hardware	14 37		
R. Mason	Sundries	17 55		8,719 73
CUT BETWEEN LAKES JOSEPH AND ROSSEAU.				
Geo. Elain.....	On Account of Contract	2,790 00		
A. Cockburn	Erecting Dams	75 00		
J. Frith	Inspecting	22 50		
J. G. Ross.....	Travelling Expenses.....	11 25		
T. N. Molesworth	do	68 75		2,967 50
WASHAGO AND GRAVENHURST ROAD.				
J. T. Kirkpatrick	On Account of Contract.....	3,448 93		
R. H. Cozens.....	Removing Wharf, &c.....	194 10		
L. W. Owen.....	Services as Clerk of Works	508 00		
James Blackwell.....	Gravel	474 12		
Wm. Syrlington.....	do	221 62		
Miller & Nicholson	do	123 00		
W. W. Anderson	do	191 24		
J. M. Skinner	do	163 68		
James Beatty	do	96 50		
F. Bridgland	do	64 65		
Henry Brines	do	30 00		
Thomas Johnson.....	do	6 25		
R. Bayley	do	6 25		
Henry Fuller	do	15 00		
John Canning.....	do	34 50		
Gilmore & Boyd	do	17 25		
James Robinson.....	do	18 75		
J. H. Jackson	Hardware	61 98		
M. Cliphav.....	do	35 00		
Wilson, Thomson & Co.....	do	3 80		
James Lloyd.....	Lumber	26 25		
H. Coggin	do	68 25		
Rice, Lewis, & Son	Wheelbarrows.....	16 90		
W. Bingham	Rope	10 12		
J. Graham	Smithwork	41 45		
Warnica & Ennes.....	do	5 75		
Carried forward.....		5,883 34	331,650 02	301,412 98

Public Works and Buildings.—Continued.

TO WHOM PAID.	SERVICE.	\$ cts.	\$ cts.	\$ ct3.
	<i>Brought forward.</i>	5,883 34	331,650 02	391,412 98
	WASILAGO AND GRAVENHURST ROAD.—Continued.			
C. McKenzie	Cartage, etc.	108 10		
Wm. Edwards	Pay Lists of men employed	2,350 29		
L. W. Owen	Travelling expenses	77 75		
T. N. Molesworth	Do	28 00		
Wm. Edwards	Do	10 50		
J. F. Edwards	Do	16 50		
	PIGEON RIVER WORKS.		8,474 48	
Thos. Walters	On account of contract	1,020 00		
Wm. Little	Services as Clerk of Works	78 00		
W. J. S. Holwell	Services as Draughtsman	169 00		
Do	Travelling expenses and disbursements	221 90		
D. Forbes	Copying	2 00		
H. A. Case	Services	4 50		
Wm. Adams	Flags	42 00		
	SYDENHAM RIVER WORKS.		1,527 40	
Wm. Taylor	On account of contract	255 00		
A. McDonell	Surveying	67 60		
T. N. Molesworth	Travelling expenses	42 00		
Sundry newspapers	Advertising	10 16		
	NOTTAWASAGA RIVER WORKS.		374 76	
Wm. Edwards	Pay Lists of men employed	1,374 92		
John Corley	Boats	44 50		
Henry Creswick	Tents, etc.	30 34		
John Heard	Wagon hire	8 40		
R. Stevens	Hardware	4 30		
S. B. Fisk	do	9 00		
J. Henderson	do	12 75		
Boys & Nelson	do	1 75		

Public Works and Buildings.—Concluded.—Immigration.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward.....</i>	78,145	73	343,932	58	361,412	98
	SURVEYS AND DRAINAGE.— <i>Continued.</i>						
Robt. Walker & Son	Blankets	28	75				
W. W. Moses	Camp utensils	20	95				
Wm. Edwards	To pay sundries	5	18				
	REGISTRY OFFICES, LOCK-UP HOUSES AND PURCHASE OF GROUND, FARRY SOUND AND THUNDER BAY.			78,200	61		
	<i>Thunder Bay.</i>						
D. D. Van Norman	Pay Lists of men employed	985	64				
Richd. Purdom	Services as draughtsman	15	00				
James Marr	do and expenses	110	00				
D. Forbes	Copying	2	00				
Robt. Kirk	Carpenter Work	311	33				
F. Travis	do	86	00				
Collins & Kramb	Plastering	219	30				
C. Campbell	Whitewashing	16	00				
Wieland Bros	Lumber	107	73				
F. Shortis	do	9	00				
Hugh Miller & Co	Paints, Oils, &c	49	63				
Ridout, Aikenhead & Crombie	Hardware	65	54				
Hunter, Rose & Co	Printing	2	28				
K. Tully	Travelling expenses	15	00	1,994	85		
	<i>Parry Sound.</i>						
J. McClelland	On account of contract	1,675	00				
Thos. H. Tracy	Services as draughtsman	12	00				
Do	Travelling expenses	15	00				
D. Forbes	Copying	2	00				
Sundry newspapers	Advertising	11	20	1,715	20		
	MISCELLANEOUS.						
	<i>Settlers' Homestead Fund.</i>						
A. Starratt	On account of contract, log-houses, &c., in the Township of Ryerson	1,344	00				

Thos. H. Tracy	Services as draughtsman	24 00			
R. Purdom	do	10 00			
D. Forbes	Copying	8 50			
L. Fallon	Services and expenses	44 20			
L. W. Owen	Inspecting	303 00			
Do	Expenses and disbursements	258 12			
F. B. Clementi	Travelling expenses	10 00			
W. Kansey & Co	Provisions	133 35			
J. Wilkinson	do	93 50			
Morrison, Taylor & Co.	do	458 94			
T. H. Johnson	do	550 13			
A. P. Cockburn	do	122 35			
J. Adams	Freight, &c.	24 00			
Hunter, Rose & Co	Printing	29 44			
Sundry newspapers	Advertising	207 90			
	Less.—First instalments received on locations of eight improved lots in the Township of Ryerson	3,682 03	3,414 87		
		267 16			
H. H. Killaly	<i>Surveys, Inspections, &c.</i>				
Geo. Lowe Reid	Inspecting and reporting on Canada Central Railway	300 00			
Dr. Macbattie	do	300 00			
W. R. Strickland	Analysing water from wells at London Asylum, and report thereon	50 00			
W. J. S. Holwell	Services as draughtsman	60 00			
Do	do Civil Engineer	78 00			
T. N. Molesworth	Expenses re survey of Nation River	294 84			
W. R. Strickland	Travelling expenses	45 00			
	do	9 50	1,137 34		
	<i>Lockmasters.</i>				
T. Laidley	Services—Lindsay Lock	150 00			
P. Young	do Young's Point Lock	75 00			
			225 00		
Jno. A. Donaldson	<i>IMMIGRATION.</i>				
R. H. Rae	Expenses—Toronto Agency	682 61			
W. J. Wills	do Hamilton do	1,024 41			
R. Macpherson	do Ottawa do	325 26			
A. G. Smith	do Kingston do	363 34			
Geo. T. Haigh	do London do	100 00			
Do	Services as Immigration Agent, Quebec	675 00			
Thos. McMurray	Expenses	332 23			
J. P. Edwards	do Bracebridge	610 00			
D. Forbes	Services as extra Clerk, Immigration Branch, Public Works Department	468 00			
S. Clarke	do	145 75			
R. Tuson	do	15 00			
	Lecturing in England	100 00			
	<i>Carried forward.</i>	4,814 60			
					822,033 43

430,620 45

Immigration.—*Concluded*.—Asylum Maintenance.—Reformatory Maintenance.—Agriculture and Arts.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>	4,841	60			822,093	43
	IMMIGRATION.— <i>Continued</i>						
Grand Trunk Railway Co.....	Carriage of Immigrants.....	1,520	63				
Great Western Railway Co.....	do.....	1,766	36				
Northern Railway Co.....	do.....	2,259	70				
Steamer, Frances Smith.....	do.....	51	00				
Do, City of Toronto.....	do.....	170	50				
Hon. J. S. Macdonald.....	Travelling expenses.....	92	00				
Hon. Jno. Carling.....	do.....	59	00				
G. B. Broomfield.....	do.....	4	00				
Horrocks Cocks.....	do.....	5	00				
Wm. Edwards.....	do.....	77	34				
Jos. Jessie.....	Postage.....	490	88				
CC Hunter, Rose & Co.....	Printing.....	11,564	55				
W. Dixon.....	Printing and advertising in England.....	421	94				
Sundry newspapers.....	Advertising.....	638	00				
Journals and publications.....	For distribution.....	814	50				
Jno. Steel.....	Provisions.....	1,765	74				
Dunn and Scott.....	do.....	1,141	27				
Davidson and Scott.....	do.....	66	82				
Geo. Harding.....	Plumbing.....	136	58				
Wm. Hewitt.....	Hardware.....	40	39				
Patton & Co.....	Crockery.....	9	89				
R. W. Laird.....	Map-mounting.....	368	90				
S. Scarlett.....	Lumber.....	54	95				
Jno. B. Smith.....	do.....	20	08				
Jno. Regg.....	Carpenter work.....	15	00				
S. McLean.....	Erecting office.....	25	00				
B. Leonard.....	Paintings, &c.....	28	53				
J. R. Armstrong.....	Stoves.....	70	45				
P. Burns.....	Fuel.....	84	43				
J. H. Richardson.....	Medical attendance.....	300	00				
J. Williams.....	Interments.....	21	00				
Toronto Hospital.....	Care of Immigrants.....	12	40				
H. Jackman.....	Bill-posting.....	7	50				
S. Hill.....	Ice.....	13	85				
J. T. Rolph.....	Stamp.....	12	00				
P. McIntyre.....	Telegrams.....	16	00				
J. S. Miller.....	Powder.....	13	30				

Wm. Edwards.....	Sundries.....	2 15		
Sundry persons.....	Cab-hire.....	7 00		
Express Co.....	Charges.....	39 25		
Wm. Knifton.....	Services at Immigration Sheds, Toronto.....	300 00		
Do.....	Wagon-hire, &c.....	363 08		29,712 56
ASYLUM MAINTENANCE.				
James McKirdy.....	Maintenance, including salaries of officers of the Toronto Lunatic Asylum, for the year ending 31st December, 1871, as per Statement No. 15.....	73,261 52		
Hy. Lander.....	Maintenance, including salaries of officers of the London Lunatic Asylum, for the year ending 31st December, 1871, as per Statement No. 16.....	55,712 27		
W. J. Palmer.....	Maintenance, including salaries of officers of the Deaf and Dumb Institute, for the year ending 31st December, 1871, as per Statement No. 17.....	20,718 06		
J. Arduagh.....	Balance due on account of Orillia Lunatic Asylum, expenditure for the year 1870.....	21 32		149,713 17
REFORMATORY MAINTENANCE.				
Wm. M. Kelly.....	Maintenance, including salaries of officers, for the year ending 31st December, 1871, as per Statement No. 18.....			21,710 00
AGRICULTURE AND ARTS.				
ELECTORAL DIVISION SOCIETIES.				
To pay Legislative Grants to the following Societies, viz. :—				
Hon. John Carling.....	Addington.....	700 00		
	Algoma.....	321 00		
	Brant, North.....	700 00		
	Brant, South.....	700 00		
	Bruce, North.....	700 00		
	Bruce, South.....	700 00		
	Bothwell.....	700 00		
	Brockville.....	350 00		
	Carleton.....	700 00		
	Cardwell.....	700 00		
	Cornwall.....	350 00		
	Dundas.....	700 00		
	Durham, East.....	700 00		
	Durham, West.....	700 00		
	Carried forward.....	8,721 00		1,023,069 16

Agriculture and Arts.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>	8,721	00			1,023,169	16
	ELECTORAL DIVISION SOCIETIES.—Continued.						
Hon. John Carling.....	To pay Legislative Grants to the following Societies, viz. :—						
	Elgin, East	700	00				
	Elgin, West	700	00				
	Essex	700	00				
	Frontenac	700	00				
	Glengarry	700	00				
	Grenville, South	700	00				
	Grey, North	700	00				
	Grey, South	700	00				
	Haldimand	700	00				
	Halton	700	00				
	Hamilton	350	00				
	Hastings, North	700	00				
	Hastings, East	700	00				
	Hastings, West	700	00				
	Huron, South	700	00				
	Huron, North	700	00				
	Kent	350	00				
	Kingston	700	00				
	Lambton	700	00				
	Lanark, North	700	00				
	Lanark, South	700	00				
	Leeds and Grenville, North	700	00				
	Leeds, South	700	00				
	Lennox	700	00				
	Lincoln	700	00				
	London	350	00				
	Middlesex, North	700	00				
	Middlesex, East	700	00				
	Middlesex, West	700	00				
	Monck	700	00				
	Niagara	350	00				
	Northumberland, East	700	00				
	Northumberland, West	700	00				
	Norfolk, North	700	00				
	Norfolk, South	700	00				

Hon. John Carling.....		To pay Legislative Grants to the following Institutes, viz. :	
		MECHANICS' INSTITUTES.	
		Ayr	400 00
		Brantford	400 00
		Bradford	200 00
		Berlin	306 40
		Brampton	292 00
		Barrie	400 00
		Collingwood	400 00
		Dundas	400 00
		Galt	400 00
		Guelph	293 00
		Grimshy	400 00
		Hamilton	400 00
		Hespeler	400 00
		Carried forward	4,691 40
			53,721 00
			1,023,169 16
Ontario, North	700 00		
Ontario, South	700 00		
Ottawa	350 00		
Oxford, North	700 00		
Oxford, South	700 00		
Peel	700 00		
Perth, North	700 00		
Perth, South	700 00		
Peterboro', East	700 00		
Peterboro', West	700 00		
Prescott	700 00		
Prince Edward	700 00		
Renfrew, North	700 00		
Renfrew, South	700 00		
Russell	700 00		
Simcoe, North	700 00		
Simcoe, South	700 00		
Stormont	700 00		
Toronto	550 00		
Victoria, North	700 00		
Victoria, South	700 00		
Waterloo, North	700 00		
Waterloo, South	700 00		
Welland	700 00		
Wellington, North	700 00		
Wellington, Centre	700 00		
Wellington, South	700 00		
Wentworth, North	700 00		
Wentworth, South	700 00		
York, North	700 00		
York, East	700 00		
York, West	700 00		

Agriculture and Arts.—*Concluded.*—Hospitals and Charities.—Literary and Scientific Institutions.—Education.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>	4,691	40	53,721	00	1,023,169	16
	MECHANICS' INSTITUTES.— <i>Continued.</i>						
Hon. Jno. Carling	To pay Legislative Grants to the following Institutes, viz.:—						
	Ingersoll	400	00				
	London	400	00				
	Meaford	150	00				
	Milton	100	00				
	Mount Forest	125	50				
	Niagara	400	00				
	Paris	200	00				
	Peterboro'	400	00				
	Port Perry	400	00				
	Renfrew	70	00				
	Richmond Hill	70	00				
	St. Catharines	400	00				
	Stratford	400	00				
	Stratford	250	00				
	Simcoe	400	00				
	Smith's Falls	150	00				
	Toronto	400	00				
	Thorold	400	00				
	Woodstock	400	00				
				10,206	90		
				10,000	00		
Hon. Jno. Carling	To pay Legislative Grant to Ontario Agriculture and Arts Association			500	00		
Hon. Jno. Carling	To pay Legislative Grant to Entomological Society			500	00		
Hon. Jno. Carling	To pay Legislative Grant to Ontario Fruit Growers' Association					74,927	90
	HOSPITALS AND CHARITIES.						
	Legislative Grant in aid of General Hospital, Toronto	11,200	00				
	do do House of Industry, Toronto	2,900	00				
	do do Protestant Orphans' Home and Female Aid Society, Toronto	640	00				
	do do Roman Catholic Orphan Asylum, Toronto	640	00				
	do do Lying-in Hospital, do	480	00				
	do do Magdalen Asylum, do	480	00				

[illegible]

Education.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>			15,647	79	1,139,707	06
	NORMAL AND MODEL SCHOOLS.						
	<i>Salaries.</i>						
J. H. Sangster.....	Seven months' salary as Head Master Normal School to 31st July, 1871, at \$2,000 per annum		1,166	66			
Rev. H. W. Davies	Five months' salary as Head Master Normal School, to 31st December, 1871, at \$2,000 per annum		833	34			
Do	Seven months' salary as Second Master Normal School, to 31st July, 1871, at \$1,500 per annum		875	00			
James Carlyle	Six months' salary as Second Master Normal School, to 31st December, 1871, at \$1,500 per annum		750	00			
Do	Six months' salary as Master Boys' Model School, to 30th June, 1871, at \$1,000 per annum		500	00			
James Hughes	Six months' salary as Master Boys' Model School, to 31st December, 1871, at \$850 per annum		424	98			
Do	Six months' salary as Assistant Master Boys' Model School, to 30th June, 1871, at \$700 per annum		350	00			
Wm. Scott	Six months' salary as Assistant Boys' Master Model School, to 31st December, 1871, at \$700 per annum		350	00			
Do	Six months' salary as Second Assistant Master Boys' Model School, to 30th June, 1871, at \$600 per annum		300	00			
Alex. McPhedrain.....	Five months' salary as Second Assistant Master Boys' Model School, to 31st December, 1871, at \$550 per annum		229	14			
Edward B. Cope.....	Four months' salary as Clerk of the Normal School		200	00			
M. Cullen.....	Twelve months' Salary as Mistress of the Girls' Model School to 31st December, 1871		700	00			
C. E. McCausland	do First Assistant		500	00			
L. H. Jones	do Second do		425	00			
Samuel Clare	do Writing Master, Normal and Model Schools,		749	98			
Wm. Armstrong	do Drawing Master, do		240	00			
H. F. Sefton	do Music Master, do		400	00			
H. Goodwin	do Gymnastic Master do		300	00			
Thos. Kirkland	do Natural Science Master, do		625	00			
John Murphy	do Janitor, do		300	00			
Jas. Forsyth	do Gardener, do		350	00			
R. McCallum	do Engineer, do		365	67			
A. Hardwick	do do do		60	00			
James Ryan.....	do do do		410	00			

John Moore	do	Assistant Gardener	do	do	336 00	
		<i>Contingencies.</i>			11,811 77	
		For the Year ending 31st December, 1871, as per Statement No. 13.....			5,977 83	17,789 60
		DEPOSITORY.				
		<i>Salaries.</i>				
S. P. May	do	Twelve month's salary as Clerk of Libraries, to 31st December, 1871	do		1,200 00	
H. M. Wilkinson	do	Assistant do	do		503 75	
B. C. Marshall	do	Clerk, to 31st March, 1871, at \$425 per annum	do		106 25	
E. Butler	do	do to 31st December, 1871	do		302 50	
R. J. Bryce	do	do do	do		160 00	
G. Barber	do	do do	do		300 00	
A. Lewis	do	do to 31st March, 1871	do		37 50	
S. A. May	do	do to 31st December, 1871	do		93 75	
Wm. Lennon	do	Labourer, do	do		280 00	
A. Ditchburn	do	Packer, do	do		240 00	
		<i>Contingencies.</i>			3,403 75	
		For the Year ending 31st December, 1871, as per Statement No. 13			1,571 25	4,975 00
		GRAMMAR SCHOOL INSPECTION.				
Rev. J. G. D. Mackenzie		Twelve months' salary as Inspector to 31st December, 1871			2,000 00	
Jas. McLellan		do do			999 98	2,999 98
		JOURNAL OF EDUCATION.				
J. G. Hodgins		Twelve month's salary as Editor to 31st December, 1871			400 00	
Hunter, Rose & Co.		Printing			1,720 00	
Sundry Newspapers and Peri- odicals		Subscription			62 99	
Jos. Leslie		Postage			187 60	2,370 59
		COLLEGIATE INSTITUTES.				
The Treasurer		County of Waterloo			375 00	
do		do Peterboro'			375 00	
do		do Northumberland			375 00	
The Chamberlain		City of Hamilton			375 00	1,500 00
		<i>Carried forward.</i>				45,282 96
						1,139,707 06

Education.—*Concluded.*—Municipalities' Fund.—Land Improvement Fund.—Crown Land Expenditure.

TO WHOM PAID.	SERVICE.	\$ cts.		\$ cts.	
		\$	cts.	\$	cts.
	<i>Brought Forward</i>			45,282	96
	PREPARING EXAMINATION PAPERS, PUBLIC SCHOOL TEACHERS.				
Rev. G. P. Young	Services	200	00		
Rev. J. G. D. Mackenzie	do	200	00		
J. A. McLellan	do	200	00		
	PUBLIC SCHOOL INSPECTION.			600	00
	Expenditure for the year ending 31st December, 1871, as per Statement No. 21.			11,527	50
	LIBRARIES, APPARATUS AND PRIZES.				
	Expenditure for the year ending 31st December, 1871, as per Statement No. 21.			34,949	02
	MUSEUM.				
	Expenditure for the year ending 31st December, 1871, as per Statement No. 21.			3,841	88
	PUBLIC AND SEPARATE SCHOOLS.				
	Expenditure for the year ending 31st December, 1871, as per Statement No. 21.			172,985	16
	POOR SCHOOLS.				
	Expenditure for the year ending 31st December, 1871, as per Statement No. 21.			5,990	00
	HIGH SCHOOLS.				
	Expenditure for the year ending 31st December, 1871, as per Statement No. 21.			69,983	00
	SUPERANNUATED TEACHERS.				
	Expenditure for the year ending 31st December, 1871, as per Statement No. 21.			6,143	88
	MUNICIPALITIES' FUND.				
Treasurers of Municipalities	Distribution of 1870, as per detailed Statement No. 19.				
				351,306	40
					68,884 00

LAND IMPROVEMENT FUND.		94,278 43
Treasurers of Municipalities		
Amounts paid to various Municipalities as per Statement No. 22.....		
CROWN LANDS EXPENDITURE.		
<i>Agents' Salaries, Commissions and Disbursements.</i>		
J. F. Way	Salary as Agent, Belleville	1,320 00
J. A. MacInnes	do Clerk	733 32
J. A. G. Crozier	do do	458 32
J. F. Way	Disbursements	573 00
D. Anderson	Salary and disbursements as Agent	383 50
J. D. Beatty	do	400 10
E. B. Borron	do	750 00
G. Bowker	do	104 18
A. A. Campbell	do	750 00
J. Graham	do	413 57
A. Kennedy	do	57 97
C. W. Lount	do	828 06
S. G. Lynn	do	376 83
J. P. Moffat	do	311 19
E. Playfair	do	375 00
J. R. Tait	do	377 91
Ex. late W. C. Armstrong	Expenses as Agent	75 00
A. S. Cadenhead	Commission and Disbursements	1,337 85
W. Halpenny	do	137 92
C. Holtermann	do	62 61
H. S. Huber	do	327 13
W. Jackson	do	1,391 33
J. MacKibbin	do	172 27
A. McNabb	do	1,617 98
R. Macpherson	do	184 11
E. Perry	do	137 72
J. Shartman	do	616 79
C. Widdler	do	636 98
J. Wilson	do	211 84
T. W. Freeman	Wood-raising	804 66
J. Hiscott	do	485 00
A. G. Judd	do	435 18
T. E. Johnson	do	844 15
C. Johnson	do	1,192 67
A. C. McDonell	do	919 50
W. Russell	do	1,919 18
J. Rodgers	do	660 50
J. Shaw	do	1,920 10
S. L. Soper	do	501 00
H. T. Strickland	do	470 00
Carried forward.....		23,394 42
		1,654,148 49

Crown Lands Expenditure.—Continued.

TO WHOM PAID.	SERVICES.	cts.	cts.	cts.
	<i>Brought forward</i>	23,804 42		1,654,148 49
F. H. Johnson	Inspecting	208 41		
J. C. Miller	do	108 31		
J. Rodgers	do	45 00		
W. McCrea	do	24 00		
A. G. Judd	do	171 00		
C. Johnson	do	30 00		
A. McDonald	Services	125 00		
G. Shearwood	do	132 00		
F. X. Belland	do	130 00		
J. C. Tarbutt	Travelling expenses	30 00		
J. M. Currie	do	14 45		
G. B. Cowper	do	40 00	24,972 59	
G. McTavish	Refund on Lot in Huron	30 00		
H. & H. Drummond	do	90 00		
A. Schaeffer	do	3 70		
F. Armstrong (Exrs)	do	58 43		
R. Lambert	do	16 00		
J. Cassidy	do	33 60		
J. M. Teenouth	do	20 00		
J. Hutchinson	do	21 65		
R. L. Campbell	do	30 00		
J. S. Palmer	do	33 00		
J. Milligan	do	15 00		
H. & B. Rachbau	do	200 00		
W. Cameron	do	37 50		
W. Grange	do	79 93		
W. Burrell	do	112 45		
M. W. Wagle	do	39 75		
J. H. Perry	do	20 00		
J. Inglis	do	5 50		
N. Burwash	do	23 30		
P. Howett and P. Shields	do	12 00		
J. Hall	do	20 00		

R. Bell	do	Alice.....	29 00
P. Knight	do	Ronney	250 00
G. Lewis	do	Olden	87 70
T. Gibbs	do	Elma	215 00
J. A. Macpherson	do	Huron	15 00
H. M. Fowles	do	Somerville	257 28
Lays and McMurrich	do	Hovick	26 86
J. H. Thompson	do	Breck.....	44 90
M. Wickham	do	Wawanosh	390 25
J. Eaton	do	Peel	158 00
W. Parson	do	M'Intyre	39 50
Jones, Brothers	do	Ashfield	38 60
do	do	Proton	279 75
do	do	Egremont.....	186 62
P. Gilchrist	do	Rana	7 64
C. Sweeton	do	Wallace	8 00
W. Shea	do	Proton	267 50
R. Staples	do	Laxton	54 00
S. E. Parsons	do	Huron	20 00
W. McAsland	do	Barrie	33 70
J. A. Macpherson	do	Bruce	93 00
J. Morin	do	Marlboro	50 00
M. Bell	do	Huron	84 00
W. Parlow	do	Matilda	75 00
J. Poulin	do	Neebing	5 28
A. R. Dougall	do	Rawdon.....	70 40
W. Weston	do	Tudor.....	126 00
N. Brown	do	Eldon	24 09
J. Lane	do	Brougham	95 00
J. Warren	do	Dover, East.....	75 18
J. White	do	Nassagaweya	200 00
A. Can	do	Yonge	18 66
E. Sims	do	Oakland	10 00
H. L. Hime	do	Mersea	485 02
A. J. Lindsay	do	Melntyre.....	100 00
B. Courmyer	do	Hungerford.....	24 00
H. S. Snider	do	Peel	21 50
A. Chesser	do	Caledonia.....	20 00
J. Dunlop	do	Alice	5 00
C. McGinnis	do	Korah	37 00
G. Dunsford	do	Verulam	30 00
J. Michelson	do	Neebing	7 00
J. P. Ferguson	do	Escott	75 00
T. Nesbitt	do	Euphrasia	40 00
J. McLeod	do	Fort William	2 00
F. G. Saltonstall	do	McTavish.....	4 50
P. Casey	do	Goulbourne	198 00
W. Carr	do	Fitzroy	20 00
W. Anderson	do	Melntyre.....	179 00
Carried forward.....			5,485 74
			24,972 59
			1,654,148 49

Crown Lands Expenditure.—Continued.

TO WHOM PAID.	SERVICE.	\$ cts.		
		\$	cts.	\$
	<i>Brought forward.....</i>	5,485	74	1,054,148
	<i>Refunds.—Continued.</i>		59	49
J. McLaurin	Refund on Lot in Neebing	16	00	
W. Burke	do Oso	10	03	
Crooks, Kingsmill & Co.	do Thunder Bay	4,136	00	
J. Teviotdale	do Stevenson	70	00	
O. Bourgeon	do Caledonia	80	00	
W. Thompson	do Sydneyham	212	10	
W. J. Macdonnell	do Tilbury E., Rochester & Romney	572	48	
J. J. Lawson, Jr.	do Carden	145	00	
P. Lacy	do Anglesca	112	20	
W. D. Pollard	do St. Vincent	36	00	
Johanna Troy	do Minto	43	91	
C. R. D. Booth	do Osprey	96	45	
G. J. Davidson	do McTavish	160	00	
E. Power	do Grattan	75	37	
W. Mason	do Edwardsburgh	12	00	
W. J. Fenton	do Culross	10	50	
J. Leys	do McIntyre	48	50	
Receiver-General	Refund of Timber dues	5	30	
F. Benzinger	do	5	25	
E. Enright	do	7	20	
R. Stoodley	do	16	27	
J. Fraser	do	8	72	
J. Johnston	do	19	97	
S. McL., Detlor	do	99	90	
A. Cloutier	do	315	00	
A. Cameron	do	133	20	
L. Young	do	400	50	
W. S. & G. Reid	do	7	72	
D. Rutledge	do	15	70	
Clark, White & Co.	do	96	00	
E. D. Orde	do	98	32	
C. Jackson	do	126	30	
C. McP. Kenyon	do	55	13	
Hotchkiss, Hughson & Co.	do	246	00	
M. Mangau	do	26	17	
E. Enright	do	35	51	
D. Hurley	do	64	40	
J. Koik	do	12	88	

C. Wright.....	do	37 95
G. Armstrong.....	do	174 82
J. G. Ross.....	do	748 51
J. Dempsey.....	do	26 59
F. Carty.....	do	85 25
M. Maigan.....	do	38 48
A. C. Thomson.....	do	18 42
W. Craig.....	Refund of Timber dues and trespass	110 38
McArthur Bros.....	do	242 92
A. H. Baldwin.....	do	183 65
D. Decaw.....	do	162 50
J. Kearns.....	do	12 68
Gillies & McLaren.....	do	477 16
D. O'Byrne.....	do	141 08
D. J. McKay.....	do	34 20
N. Fachney.....	do	31 79
Merrick, Fowler & Co.....	do	79 61
H. & H. Drummond.....	Refund of Settlers License	4 00
N. Metz.....	do	4 00
J. Macfarlane.....	do	4 00
D. Fleming.....	do	4 00
T. Holmes.....	do	4 00
J. Telfer.....	do	4 00
T. McWilliams.....	do	4 00
W. Duncan.....	do	4 00
D. Smith.....	do	4 00
H. Matthews.....	do	4 00
B. Hales.....	do	4 00
J. Staples.....	do	4 00
J. Dillon.....	do	4 00
D. O'Donnell.....	do	4 00
R. Carty.....	do	4 00
J. Burnam.....	do	4 00
A. Stewart.....	do	4 00
W. Barkley.....	do	4 00
M. Hobins.....	do	4 00
W. Brenner.....	Refund of Settlers Licenses	12 00
D. C. Thompson.....	Refund of Timber License	1,200 00
C. J. Blomfield.....	Refund for Road in Canada Land and Emigration Company's limits	4,424 31
Do.....	do of ground rent	179 40
Hon. S. Smith.....	do of fees on Free Grants	96 00
D. Bronson.....	do on mineral land	754 00
R. Barber.....	do	408 00
W. L. Booth.....	do	41 00
Mary Graves.....	do of value of timber cut in Laxton	2 56
R. Fuller.....	do on mill site, French River	61 41
C. Johnson.....	do of half charge for running line in Russell	20 00
W. J. Macaulay.....	do of amount in deposit unapplied	20 40
		23,098 82
		48,071 41
		1,654,148 49

Carried forward

Crown Lands Expenditure.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>			48,071	41		1,654,155 89
	<i>Surveys.</i>						
R. Hamilton	Survey of Timber Berths	2,029	18				
V. B. Wadsworth	do	785	87				
Do	do	148	33				
W. Bell	N. Orillia and Matchedash	4,000	00				
W. Bestly	Timber Berths	1,812	03				
Do	do	378	22				
Do	Chaffey, Stisted and McMurrich	279	08				
Do	Exploration N. Lake Superior	520	46				
J. A. Fleming	do	1,118	38				
C. F. Miles	Survey of McMurrich and Stephenson	443	67				
Forneri & Kennedy	Faraday	288	66				
M. McFadden	do	81	00				
T. B. Clementi	Croft	1,932	16				
T. Byrne	Ryerson	2,413	60				
A. B. Scott	Monteith and McMurrich	733	82				
H. Little	Spence and McGregor	140	00				
B. Springer	Chapman	700	00				
H. Wilson	Part of township of Wingham	97	59				
C. Brady	Prince Arthur's Landing			17,902	05		
	Residue of Anglessea						
	<i>Colonization Roads.</i>						
P. C. Campbell	On account work on Muskoka and Bobcaygeon roads	3,677	10				
Do	do	47	79				
Do	Skeleton river bridge	74	93				
D. J. Campbell	Rousseau road	1,326	50				
W. Ashdown	function road No. 2	345	24				
Do	Draper and Indian river bridges	200	00				
C. F. Aylsworth	Muskoka road	3,315	85				
A. P. Cockburn	Rousseau and Nipissing roads	114	15				
C. E. Aylsworth	Muskoka road	50	00				
Do	Hastings road	100	00				
J. Graham	Brunel bridge	3,179	40				
Do	Monck road east	858	36				
T. G. Haylett	Peterson road	320	00				
A. G. Judd	Monck road west	2,777	79				
S. Armstrong	do	688	00				
Do	Northern and Junction roads	855	00				
	Lake Joseph and North West roads						

Do	Junction bridge	50 00
J. & W. Beatty	Northern and Junction roads	930 00
Do	Seguin river bridge	100 00
J. Doran	Pembroke and Mattawa roads	234 30
J. Rowan	do	5,200 00
P. Tallon	do	1,962 00
H. Smith	Aldington road	846 00
J. D. Beatty	Parry Sound road	125 84
P. Vankleeck	Hastings road	1,000 00
D. Anderson	Burleigh road	300 00
G. Bick	Kimnour road	1,000 00
W. D. Mace	Loboro and Bedford roads	998 00
W. Smith	Lake Joseph road	1,147 91
J. Staples	Victoria road	3,000 00
J. Reeves	Pembroke and Eganville roads	1,000 00
T. Carmichael	Indian river bridge	150 00
R. Irvin	Skeleton Lake road	338 67
C. W. Lount	Muskoka road (inter-section)	134 58
D. Hogabean	Brunei bridge	15 00
J. Bird	Chandos road	180 00
W. Graham	do	1,607 15
W. Carney	Great Northern and Korah roads	1,400 00
S. Ross	Peterson road	600 00
S. D. Ross	do	400 00
S. Youmans	Frontenac road	721 89
Wright, Batson & Currie	Frontenac and Madawaska roads	300 00
G. Hunt	Muskoka bridge	66 62
R. Turner	Boys and Eganville roads	711 16
W. Haryatt	Brudenell and Peterboro' roads	603 26
P. Gorman	Opeongo road	150 00
J. Fensom	McAnlay bridge	54 75
J. Moore	Oso and Sherbrooke roads	297 50
Supplies		88 02
W. Hewitt & Co		924 48
W. & R. Griffith		4,331 04
J. B. Boustead		1,137 66
Dodge & Co		1,648 40
Hunter Bros.		79 00
E. Lawson		72 40
J. McDonald		5 00
C. Potter	For a Surveyor's chain	81 70
T. H. Johnson	Inspecting	187 50
J. W. Bridgland		50 00
P. C. Campbell		220 45
C. F. Aylsworth		19 00
A. Irving	Salary as Superintendent of Colonization roads	1,600 00
J. W. Bridgland	To pay men employed, roads in Ryerson	429 63
W. Edwards	On account contract	378 00
Geo. Geary	do	312 21
L. W. Owen	Services and expense inspecting	
Carried forward		55,119 24
		65,973 46
		1,654,155 89

Crown Lands Disposition—*Concluded*.—Arbitration.—Charges on Revenue.

TO WHOM PAID.	SERVICE.	§	cts.	§	cts.	cts.
	<i>Brought forward</i>	55,119	24	65,973	46	1,654,155 89
	<i>Colonization Roads.—Continued.</i>					
R. C. Campbell	Services and expense inspecting Roads in Ryerson	159	19			
L. Fallon	do	26	07			
G. J. Booth	Surveying utensils	15	20			
Sundry persons	do	26	23			
Do	do	45	00			
Rice Lewis & Son	Teaming	18	65			
	Hardware			55,409	04	
	<i>Inspectors Valuing Lands.</i>					
J. Barwick	Services	100	30			
G. Brant	do	40	00			
J. L. Brodie	do	125	00			
S. Clopp, jr.	do	50	00			
Thos. Flynn	do	150	00			
G. Harshaw	do	50	00			
C. Johnson	do	50	00			
J. W. Lewis	do	50	00			
H. Lillie	do	1,008	18			
D. Lawson	do	42	10			
T. Molesworth	do	50	00			
D. Morrow	do	14	00			
R. C. McCallum	do	50	00			
H. McCreagh	do	307	52			
J. McVeigh	do	50	00			
G. Rankin	do	50	00			
W. Stokes	do	80	00			
B. Switzer	do	50	00			
D. Thorburn	do	80	00			
G. Wardrope	do	557	00			
		16	00			
	<i>Boundary Survey Line.</i>			2,920	10	
Hon. Wm. McDougall	Services as Arbitrator on behalf of Ontario					400 00

BOARD OF SURVEYORS.			112 20	124,814 80
Hon. S. Richards	To pay expenses of Board, January, April and July Sessions, 1871	82 20		
Hon. M. C. Cameron	do	30 00		
MISCELLANEOUS.				
Jno. McLaughlin	Costs incurred by him in re Hammond	1,097 46		
J. A. Skinner	To assist in defraying expenses of Volunteers attending Wimbledon Rifle Match	1,600 00		
C. S. Gzowski	In aid of Ontario Rifle Association	500 00		
Jas. Cunningham	In aid of sufferers by the Ottawa fires	25,000 00		
J. Langlois	In aid of sufferers by the Saguenay fires	5,000 00		
Hon. E. B. Wood	To pay expenses connected with reception of American Association of Medical Students	1,157 77		
W. K. Muir	Compensation to Steamer "Dove" for non-fulfilment of contract re transfer of patients from Malden to London, L. A.	200 00		
Samuel & Reed	Services and expenses examining ravages of Colorado Beetle	104 00		
L. Columbus	Extending telegraph line to Penetanguishene	100 00		
S. P. Maybee	Inspection of Railway routes	400 00		34,559 23
ARBITRATION.				
Hon. J. H. Cameron	Services re Arbitration	500 00		
Hon. A. A. Dorion	do	400 00		
A. J. Russell	do	1,250 00		
Hon. E. B. Wood	Travelling expenses re Arbitration	40 00		
Hon. S. Richards	do	28 75		
Hunter, Rose & Co	Printing	372 98		
Jno. Lovell	do	28 25		
Robertson & Cook	do	50 00		
Carried forward				2,669 98
				1,816,199 90

Charges on Revenue.—*Concluded.*—Crown Lands Expenditure.—Stationery Account.

TO WHOM PAID.	SERVICE.	%	cts.	%	cts.	%	cts.
	<i>Brought forward</i>						1,846,199 90
	CHARGES ON REVENUE.						
	MISCELLANEOUS.						
Jos. Lesslie	Postage Stamp and License Office	112	09				
Hunter, Rose & Co.	Printing do	86	03				
Wm. Notman	Stationery do	29	00				
Express Co.	Charges Stamp and License Office	48	82				
Wm. Kersteman	Services do	24	00				
James Ross	Sundries do	14	77				
Hy. Totten	Services re Algoma Taxes	235	00				
Sundry persons	Postage Stamps re Municipalities Fund	34	50				584 21
	STATIONERY ACCOUNT.						
Cowan & Co.	Sundries supplied Queen's Printer	2,176	45				
Burtin Bro. & Co.	do	830	29				
Jas. Campbell & Son.	do	355	42				
Copp, Clarke & Co.	do	318	00				
R. W. Laird	do	11	80				

Wm. Hewitt & Co.	207 40
do	
To pay Customs duties and freight . . .	461 23
Printing	70 86
	4,431 45
	4,348 78
Less distributed to Departments	
Total	1,816,806 78
	82 67

W. R. HARRIS,
Accountant.

A. MACKENZIE,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 13.

STATEMENT shewing the details of Contingencies referred to in the preceding Statement for the year ended 31st December, 1871.

TO WHOM PAID.	SERVICE.	\$ cts.	\$ cts.	\$ cts.
<i>Lieutenant-Governor's Office.</i>				
Joseph Lesslie	Postage.....	49 78		
Montreal Telegraph Co.	Telegrams.....	47 07		
Hunter, Rose & Co.	Printing.....		96 85	
John Notman	Stationery.....	33 92	25 99	
John Lovell.....	Dominion Directories	24 00		
James Bain	City Directories.....	7 50		
Copp, Clark & Co.	Books, &c.	30 09		
Sundry newspapers.	Subscription and advertising		95 51	
N. L. Piper & Son.....	Sundries.....	6 60	32 20	
C. James Adams	Repairing flag.....	16 40		
Col. Dennis	Travelling expenses	28 75	23 00	
Sundry persons.....	Cab hire.....	3 50		
<i>Executive Council Office and Attorney-General's Office.</i>				
Joseph Lesslie	Postage.....	258 60		
George McDonell.	do	43 85		
Montreal Telegraph Co.	Telegrams.....	352 97		
Dominion	do	154 02		
Hunter, Rose & Co.	Printing.....		789 44	
John Notman	Stationery.....	113 73	153 92	
J. Rordans	Books.....	127 50		
Adam, Stevenson & Co.	do	9 60		
S. Hackett.....	do	39 00		
Copp, Clark & Co.	do	14 40		
Brown Bros.....	do	9 75		
John Wiley & Son	do	138 26		
Henry Rowsell.....	do	19 39		
K. Carswell	do	90 00		
John Lovell	Dominion Directories	24 00		
John Lowe & Co.	Year books	75		
Robertson & Cook	City Directory.....	2 00		
			305 80	

Meehan & Doust.....	Sundries ..	2 85	591 23
Sundry Newspapers	Subscription and Advertising		110 90
Metropolitan Water Co.	Water	20 00	
C. Burns	Ice	7 50	
Geo. Chaffey & Bros.	Fuel	23 20	
T. C. Chisholm	do	110 40	
P. Burns	do	118 70	
Consumers' Gas Co.	Gas	41 31	
Fulton, Michie & Co.	Candles.....	22 55	
Robert Wilkes.....	Calendar clock	35 00	313 66
M. Smith	Sundries	51 02	
W. B. Malcolm	Rubber hose	23 24	
A. O. Andrews	Table.....	10 25	119 51
John Boxall.....	Tinsmithing	13 85	
Cunning & Wells	Repairs.....	2 81	16 66
A. McDonell	Travelling expenses.....	8 00	
Henry Kinloch	do	126 00	177 00
Hon. J. S. Macdonald	do	43 00	300 00
G. D. Boulton.....	Office rent ..		
			2,602 32
Treasury Department.			
Sundry persons	Postage stamps	192 40	
Montreal Telegraph Co.....	Telegrams	159 63	
Dominion	do	3 90	
Hunter, Rose & Co.	Printing	174 81	355 93
John Notman	Stationery	80 00	328 54
J. T. Rolph	Bank cheques.....	24 00	
John Lovell	Dominion directories	75	
John Lowe & Co.	Year Books.....	2 00	
Henry Rowsell	Books	2 00	
Robertson & Cook	City Directory	2 00	
J. D. Linton	Almanacs	1 00	284 56
Sundry Newspapers	Subscription and Advertising		65 23
A. McDonell	Cleaning, &c.	10 70	
Jacques & Hay	Book-case.....	30 00	
J. Robinson & Co.	Ice pitchers.....	10 00	
R. Jordan	Whisks.....	1 45	
Rice, Lewis & Son	Cash box.....	4 00	56 15
	Carried forward.....		1,090 41
			2,908 12

Contingencies—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>			1,090	41		2,908 12
Express Co.	Charges		7 80				
Sundry persons	Cab hire		49 69				
Hon. E. B. Wood	Travelling expenses		40 00				
John Little	Services as extra Clerk			97	49		
				131	25		1,319 15
	<i>Secretary and Registrar's Department.</i>						
Jos. Leslie	Postage		219 15				
Montreal Telegraph Co.	Telegrams		47 86				
Dominion	do		15 34				
				282	35		
				384	33		
Hunter, Rose & Co.	Printing		196 67				
John Notman	Stationery		24 00				
John Lovell	Dominion Directories		75				
John Lowe & Co.	Year Books		4 00				
Robertson & Cook	Toronto Directories		75				
J. D. Linton	Almanacs		6 50				
J. F. Ward	Map			232	67		
				60	20		
Sundry newspapers	Subscription and Advertising			1	20		
A. McDonell	Hemming towels			1	75		
Express Co.	Charges			23	40		
T. C. Patteson	Travelling expenses			108	00		
J. Alley	Services as extra Clerk						1,093 90
	<i>Department of Agriculture and Public Works.</i>						
Jos. Leslie	Postage		275 94				
Montreal Telegraph Co.	Telegrams		380 51				
Dominion	do		4 24				
				252	25		
Hunter, Rose & Co.	Printing		24 00				
John Notman	Stationery						
John Lovell	Dominion Directories						
Robertson & Cook	Toronto		4 00				

John Edwards	Stationery	38 05	
F. Smith	do	45 00	
Jno. Hogg	Map	7 00	
Irving & Co.	do	1 50	
J. D. Linton	Almanacs	2 00	
R. W. Laird	Frames	12 00	
J. M. Trout	Books	24 00	379 80
Sundry newspapers and periodicals	Subscription and advertising		152 87
A. McDonell	Hemming fowls	1 20	
Wm. Edwards	Sundries	5 15	
Dodge & Jenniss	Coat racks	5 00	
A. Smith, V. S.	Investigating cattle disease	24 00	35 35
Express Co.	Charges		14 55
Sundry persons	Cab hire	43 75	
Prof. Buckland	Travelling expenses	46 50	
F. T. Jones	do	28 15	
John Davies	do	10 00	128 40
Do	Services as extra clerk	599 96	
R. L. Brydges	do	234 00	
John Steel	do	15 00	
H. N. Edliss	do	8 00	
A. McDonell	do	5 00	801 96
J. Morphy	Postage	400 00	
Montreal Telegraph Co.	Telegrams	83 52	
Dominion	do	98	
Hunter, Rose & Co.	Printing	1,169 00	
Jno. Notman	Stationery	2 00	
Jno. Lowe & Co.	Year Books	46 00	
Corp, Clarke & Co.	Maps, &c.	24 00	
Jno. Lovell	Dominion Directories	8 00	
Robertson & Cook	Toronto do	6 36	
Hy Rowsell	Law Reports	5 00	
Jno. Jacobs	Pens	1 25	
Chas. Potter	do		1,261 61
Sundry newspapers	Subscription and advertising		797 29
Metropolitan Water Co.	Water	115 00	
W. J. Lewis	Ice	12 00	
Geo. Chaffey & Bro.	Fuel	17 60	
T. C. Chisholm	do	547 50	
P. Burns	do	301 45	963 55
			4,803 50
			2,562 41
			7,883 58

Carried forward.

Contingencies—Continued.

TO WHOM PAID.	S E R V I C E.	cts.	cts.	cts.
	<i>Brought forward</i>		4,843 50	7,883 58
	<i>Crown Lands Department—Continued.</i>			
Jno. Boxall.	Tinsmithing	245 41		
Thos. Labor	Locksmithing	49 50		
T. Beyon	do	6 15		
Geo. Harding	Painting	7 65		
Robert Bell	do	136 37		
D. Grant	Carpenter work	131 00		
J. B. Smith	Lumber	35 85		
R. Hay & Co.	Furniture	261 00		
H. Piper	Tinware	6 00		
P. Paterson & Son	Hardware	63 23		
A. Macmillan	Repairing gates, &c.	96 50		
J. O'Malley	do	6 00		
Wm. Townsend	do	39 45		
B. Walton	do	17 00		
Hugh Miller	Linen, &c.	6 75		
Sundry persons	Points	66 15		
F. O'Brien	Repairs	1 20		
Tolson & Hunter	Carriages	13 60		
	Towelling		1,472 88	
J. Goodshaw	Office cleaning, &c.	328 52		
W. R. Roberts	Street widening	13 60		
			341 52	
H. G. Gillespie	Expenses	37 50		
P. McGregor	Low carts	225 53		
Hon. S. Richards	Registering deeds, &c.	10 00		
Bank of Montreal	Postage	1 53		
			344 56	
Express Co.	Charges	1 20		
P. Alton	Services as extra clerk	398 00		
W. H. Ball	do	341 00		
J. Sals	do	341 34		
W. Bevell	do	182 00		
W. Schofield	do	82 00		
F. P. Stacey	do	12 00		
F. S. Alexander	do	6 00		
R. Burroughs	Services as fireman	365 00		
			1,717 34	

Wm. Noble	Travelling expenses	10 00			
J. C. Tarbutt	do	3 00	13 00	8,454 00	
<i>Auditor's Office.</i>					
Jno. Notman	Stationery				
C. Jno. Lowe & Co	Year books		9 93		
J. D. Linton	Almanacs		75		
			50		
<i>Queen's Printer's Office.</i>					
Jos. Lesslie	Postage				11 18
Hunter, Rose & Co	Printing		57 28		
Jno. Notman	Stationery		3 11		
			11 78		
<i>Legislation.</i>					
Montreal Telegraph Co	Telegrams	29 51			
Dominion do	do	3 72			
Hunter, Rose & Co	Printing				
Jno. Notman	Stationery	41 88	33 23		
Brown Bros	Books	7 65	597 35		
Adams, Stevenson & Co	do	159 48			
Jno. Lovell	Dominion Directory	12 00			
<i>Subscription and advertising.</i>					
Sundry Newspapers	Subscription and advertising		221 01		
Ontario Ice Co	Ice		687 40		
Thos. Lalor	Locksmithing	22 65	35 00		
Jno. Boxall	Tinsmithing	11 63			
J. E. Ellis	Repairing clocks	39 00			
J. T. Rolph	Engraving	12 25			
Owen Bros	Engraving	5 00			
			89 93		
Cleverdon & Combe	Filter, &c.	4 50			
C. Thompson	Soap, &c.	123 20			
J. G. Joseph	Sword and belt and Sundry furnishings for Sergeant-at-Arms	128 50			
J. Stovel	Official suit for Clerk	92 40			
B. Saunders	do	100 00			
R. Score & Son	Silk gowns	16 00			
Mr. Sheaker	Gown for Assistant Clerk	50 00			
Thos. Phillips	Sundries	9 75			
Rice Lewis & Son	Meals to operator	222 35			
Patton & Co	Safe	13 70			
Wm. Dryden	Delf	9 97			
R. Hay & Co	Brushes	47 70			
Wm. Arthurs & Co	Furniture	98 40			
	Dry goods		996 47		
<i>Carried forward.</i>					
			2,591 39	16,420 93	

Contingencies—Continued.

TO WHOM PAID.	S E R V I C E.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward.....</i>			2,591	39	16,420	93
	<i>Legislation.—Continued.</i>						
Thos. Phillips	Cleaning			175	11		
Express Co.	Charges	69	83				
Sundry persons	Cartage	3	25				
Do	Cab hire			73	08		
Major W. N. Alger	Escort for His Excellency at opening of the House			95	75		
	<i>Court of Chancery.</i>			57	00		
						2,992	33
Jos. Lesslie	Postage			91	47		
Hunter, Rose & Co	Printing			298	27		
Jno. Notman	Stationery			227	52		
Ontario Ice Co.	Ice	10	00	8	00		
J. E. Ellis	Repairing clocks	20	25				
D. Vardon	Sundry repairs	47	30				
D. Sutherland	Sundries	21	00				
J. T. Rolph	Cancelling-stamps			101	55		
Richd. Graham	Stamps on proceedings			278	40		
M. Ireland	Copying	101	00				
A. L. Doyle	do	19	00				
L. Gordon	do	4	35				
W. Cumming	Extra services	77	00				
A. Grant	Allowance to Judge's library			201	35		
	<i>Court of Queen's Bench.</i>			100	00		
						1,276	56
Jos. Lesslie	Postage			111	38		
Hunter, Rose & Co	Printing			119	21		
Jno. Notman	Stationery						
Jno. Lovell	Dominion Directory	45	72				
		12	00				
J. T. Rolph	Stamp ribbon	1	50				
A. Aird	Crockery	3	95				
L. Jordan	Soap	2	25				
James Alexander	Sundry repairs, &c.	130	20				
						137	90

R. G. Dalton	Drawing Precepts	37 00	97 00	633 21
N. C. Jarvis	Copying	60 00	100 00	
R. G. Dalton	Allowance to Judge's library			
Court of Common Pleas.				
Jos. Lesslie	Postage		7 22	
Hunter, Rose & Co	Printing		3 56	
Jno. Notman	Stationery		45 08	
M. B. Jackson	Allowance to Judge's library		100 00	155 86
Normal and Model Schools.				
Dr. Sangster	Post Office box		9 00	
Hunter, Rose & Co	Printing		325 05	
S. P. May	Books, &c.		2013 04	
Sundry Newspapers	Advertising		43 60	
Metropolitan Water Co.	Water	300 00		
Geo. Chaffey & Bro	Fuel	51 10		
J. Snarr	do	125 00		
P. Burns	do	640 00		
Consumers Gas Co.	Gas	26 61		
			1,142 71	
Alex. Hamilton	Painting and glazing	800 00		
Geo. Harding	Plumbing	447 06		
Geo. Ringham	Tinsmithing	56 46		
Donald Grant	Carpenter work	12 00		
Jno. Rogers	do	253 97		
W. St. Croix	Plaster work	37 00		
Brimston & Bro	Sundry repairs	19 15		
			1,625 64	
Jacques & Hay	Furniture	120 21		
Wm. H. Sparrow	Furnishings	141 72		
James Fleming	do	16 45		
F. W. Gault	Garden chairs	11 60		
James Forsyth	Trees, flowers, &c.	180 95		
			470 93	
P. Paterson & Sons	Hardware	5 98		
John B. Smith	Lumber	5 68		
E. M. Murphy	Clocks	140 00		
R. A. Wood	Chemicals	90 31		
R. S. Williams & Co.	Piano hire	6 00		
			247 97	
Sundry persons.	Cleaning	16 59		
Robt. Rennie	Clearing snow	40 00		
			5,907 94	
	Carried forward	56 50		21,478 89

Contingencies—Concluded.

TO WHOM PAID.	SERVICE.	\$ cts.	\$ cts.	\$ cts.
Jno. Murphy	<i>Brought forward.</i>	56 59	5,907 94	21,478 89
Express Co.....	<i>Normal and Model Schools—Continued.</i>	10 50	67 09	
	Cleaning rifles.....		2 80	
	Charges.....			5,977 83
	<i>Depository.</i>			
Joseph Lesslie.....	Postage.....		189 36	
Hunter, Rose & Co.....	Printing		134 14	
John Taylor & Bros	Stationery.....		48 15	
E. J. Potter.....	do		87 80	
James Campbell & Son.....	do		55 44	
Or George Chaffey & Bro	Fuel	16 00		
J. Starr.....	do	62 00		
P. Burns	do	275 25		
Metropolitan Water Co.....	Water supply.....	50 00		
John Rogers.....	Carpenter work.....		403 25	
W. H. Sparrow	Hardware.....		402 30	
Jas. Forsyth.....	Packing cases		18 30	
J. B. Carter.....	Papering		10 80	
Sundry persons.....	Telegrams, express charges, &c.....		11 20	
Neil Meehan.....	do		27 82	
			182 69	1,571 25
	<i>Education Office.</i>			
Joseph Lesslie.....	Postage.....	598 69		
Sundry persons.....	Postage stamps	63 20		
	Printing.....		661 89	
Hunter, Rose & Co.....	Books.....	89 19	1,545 97	
E. J. Potter.....	Stationery.....	50 67		
Copp, Clark & Co.....	Directories	20 00		
John Lovell				
	Subscription and advertising.....		159 86	
Sundry newspapers	Fuel	16 00	175 60	
George Chaffey & Bro	do	26 00		
J. Starr.....				

P. Burns	do	275 00	
Metropolitan Water Co.	Water supply	50 00	
John Rogers	Carpenter work		367 00
Jacques & Hay	Furniture		282 60
Wm. H. Sparrow	Stove pipe		145 22
Hy. Graham	Wool	7 55	
F. W. Conte & Co.	Writing desk	9 00	
		20 00	
Sundry persons.	Telegrams, express charges, &c.		37 15
Collector of Customs	Customs duties		59 18
Hodgins, Bull & McWilliams	Law costs		50 00
			150 32
Total			3,634 79
			32,662 76

W. R. HARRIS,
Accountant.

A. MACKENZIE,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 14.

STATEMENT of Expenditure for Carpenter work, Tinsmithing, Plumbing, &c., at East Wing, Parliament Buildings, for 1871.

TO WHOM PAID.	SERVICE.	\$ cts.	\$ cts.
D. Grant	Carpenter work.....	24 00	
Jno. B. Smith	Lumber	53 36	
Jno. Boxall	Tinsmithing	101 25	
Geo. Harding	Plumbing	101 47	
T. Lalor.....	Locksmithing	5 90	
R. Hay & Co.....	Furniture and repairs.....	310 90	
H. Piper	Furnishings	83 58	
P. Paterson & Son.....	Hardware	74 69	
Hugh Miller & Co.....	Paints, oils, &c.....	21 43	
Hy. Graham & Co.....	Matting	43 60	
R. Jordan & Co.....	Soap.....	33 40	
Sundry persons	Glassware	6 35	
Do	Repairs	49 50	
Do	Cartage	14 20	
H. Anderson.....	Whitewashing	20 00	
A. McDowell	Cleaning	98 47	
W. R. Roberts.....	Street watering.....	13 00	
Metropolitan Water Co.....	Water	115 00	

Sundry persons	Ice	27 20
Consumers' Gas Co.....	Gas	63 91
P. Burns	Fuel	305 94
T. C. Clisholm.....	do	172 59
Geo. Chaffey & Son.....	do	17 63
Sundry Newspapers	Advertising	15 03
A. McDonell	Twelve months' salary as Housekeeper, to 31st December, 1871.....	600 00
Jno. Simser	do Fireman, do	365 00
Chargeable as follows :—		2,892 25
Treasury Department.....		131 03
Secretary and Registrar's Department ...		934 08
Public Works Department.....		934 08
		2,992 25

A. MACKENZIE,
Treasurer.

W. R. HARRIS,
Accountant.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 15.

THE ASYLUM FOR THE INSANE, Toronto, in account with the Province of Ontario, for the year ended 31st December, 1871.

Dr.	\$ cts.	Cr.	\$ cts.	\$ cts.
To Warrants issued during the year.....	73,261 52			
To Receipts for the year.....	15,222 96			15,222 96
		By deposited to the credit of the Treasurer.....		
		By expenditure during the year, viz. :—		
		Advertising, printing and stationery.....		
		Amusements.....	261 57	
		Beer, wine and spirits.....	57 26	
		Butcher's meat.....	1,943 20	
		Butter and cheese.....	10,289 11	
		Barley, rice, peas, etc.....	3,378 87	
		Brushes, brooms, mops, etc.....	918 54	
		Bedding, clothing and shoes.....	226 02	
		Coffee and tea.....	3,651 35	
		Crockery and glassware.....	2,494 31	
		Clergy cab hire.....	48 00	
		Eggs, fish and fowl.....	73 00	
		Flour.....	989 32	
		Fruit and vegetables.....	8,019 50	
		Fuel.....	435 43	
		Furniture.....	441 83	
		Farm feed and fodder.....	901 72	
		Farraces and engine house.....	191 86	
		Freight.....	50 09	
		Gas, oil, candles and matches.....	2,312 39	
		Interments.....	70 00	
		Improvements.....	122 26	
		Incidentals.....	48 33	
		Ice.....	60 00	
		Laundry and Soap.....	762 25	
		Law expenses.....	51 83	
		Library.....	25 75	
		Medicines.....	308 86	
		Officers' travelling expenses.....	31 90	
		Postage, telegrams and express charges.....	152 29	
		Removal of patients.....	40 00	
		Repairs.....	1,596 00	
		Recovery of elopers.....	1 10	
		Salt, pepper, mustard, etc.....	100 10	

Total.....		88,494 48	
Total.....		19,346 40	53,915 12
Sugar and Syrup		2,422 02	
Straw		317 32	
Tobacco and pipes		129 96	
Tools		58 65	
Salaries and wages as follows, viz. :—			
Medical Superintendent.....		2,000 00	
Bursar.....		1,200 00	
Medical Assistant		1,000 00	
Clinical do		300 00	
Steward		600 00	
Matron		400 00	
Engineer.....		740 00	
Keepers, guards, etc.		13,106 40	
Total.....			

W. R. HARRIS,
Accountant.

A. MACKENZIE,
Treasurer.

STREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 16.

THE ASYLUM FOR INSANE, London, in account with the Province of Ontario, for the year ended 31st December 1871.

Dr.	\$ cts.	Cr.	\$ cts.	\$ cts.
To warrants issued during the year.....	55,712 27	By deposited to the credit of the Treasurer.....	1,147 62	1,147 62
To receipts for the year.....	1,147 62	By expenditure during the year, as follows :—		
		Advertising, printing and stationery	449 06	
		Amusements	217 11	
		Beer, wine and spirits.....	1,377 97	
		Butter and cheese.....	2,141 55	
		Bedding and clothing	3,365 40	
		Boots and shoes.....	914 45	
		Brushes, brooms, &c.....	255 24	
		Barley, rice, &c.....	364 18	
		Butcher's meat	5,570 21	
		Coffee and tea	1,102 00	
		Crockery and glass	146 31	
		Customs duties	186 30	
		Eggs, fish and fowl	624 35	
		Fruit and vegetables	679 16	
		Flour	4,041 16	
		Fuel.....	5,463 51	
		Farm, feed and fodder	4,320 27	
		Furniture	1,225 39	
		Freight	248 16	
		Hardware and tinware	784 63	
		Incidentals	241 88	
		Interments.....	242 00	
		Ice.....	121 80	
		Light	1,114 21	
		Laundry and soap	874 68	
		Medicine.....	343 53	
		Officers' travelling expenses	81 50	
		Postage, telegrams, &c.....	153 28	
		Repairs	1,882 59	
		Removal of patients	28 50	
		Recovery of elopers.....	5 02	
		Rent and taxes	139 62	
		Sugar and syrup	1,655 53	
		Salt, pepper, &c.....	125 27	

Shrubs and flowers	12 50	
Tobacco and pipes	184 58	40,688 90
Salaries and wages, as follows :—		
Medical Superintendent	2,000 00	
Assistant Physician	800 00	
Book-keeper	800 00	
Steward	600 00	
Engineer	740 00	
Keepers, guards, &c.	10,083 37	15,023 37
Total		56,859 89

NOTE.—The above Statement does not include Expenditure for December, 1871, with exception of Salaries.

W. R. HARRIS,
Accountant.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

A. MACKENZIE,
Treasurer.

No. 17.

THE INSTITUTION FOR DEAF AND DUMB, Belleville, in account with the Province of Ontario, for the year ending 31st December, 1871.

Dr.	\$ cts.	Cr.	\$ cts.	\$ cts.
To Warrants issued during the year.....	20,718 06 1,953 67	By deposited to the credit of the Treasurer.....		1,953 67
To Receipts for the year.....				
		By Expenditure during the year as follows, viz. :— Advertising, Printing, and Stationery Amusements Butcher's Meat..... Butter and Cheese Barley, Rice, &c..... Bedding, Clothing, and Shoes Brushes, Brooms, &c..... Coffee and Tea Crockery and Glass..... Drainage..... Eggs, Fish, Fowls Elopement expenses Flour Fruits and Vegetables Fuel Furniture Farm, Feed, and Fodder Gas, Oil, Candles, &c..... Incidentals Ice Laundry and Soap Library..... Medicines New Construction..... Officers' Travelling Expenses..... Orphans' do Postages, Telegrams, &c. Repairs Salt, Pepper, &c. Sugar and Syrup School Books.....	291 34 182 45 1,758 35 954 99 87 22 380 86 143 07 303 79 34 03 6 27 379 01 5 75 886 38 480 69 2,309 35 713 03 946 25 174 48 394 95 13 00 219 90 189 10 411 78 20 94 171 54 5 30 200 51 390 83 116 06 603 91 49 39	
				12,824 52

Salaries and Wages as follows:—		
Principal	1,465 66	
Teacher	733 32	
do	733 32	
do	458 32	
do	275 00	
Steward	733 32	
Matron	275 00	
Engineer	530 00	
Workman and Servants	2,668 60	
Total	7,893 54	
Total	22,671 73	

NOTE.—The above Statement does not include Expenditure for December, 1871.

W. R. HARRIS,

Accountant.

A. MACKENZIE,

Treasurer.

TREASURY DEPARTMENT, ONTARIO,

TORONTO, December 30th, 1871.

No. 18.

THE REFORMATORY PRISON, in account with the Province of Ontario, for the year ended 31st December, 1871.

Dr.	\$ cts.	Cr.	\$ cts.	\$ cts.
To Warrants issued during the year.....	21,710 00	By deposited to the credit of the Treasurer.....	1,770 00	1,770 00
To receipts for the year	1,770 00	By expenditure during the year as follows, viz:—		
		Bedding	159 42	
		Blacksmith shop	87 64	
		Clothing	2,437 49	
		Cleaning	251 88	
		Chapel and School	260 28	
		Cooperage	129 66	
		Convict travelling allowance.....	317 00	
		Convict removing expenses	104 75	
		Elopements	140 00	
		Farm and stable	624 12	
		Furniture	252 13	
		Freight	223 30	
		Garden	6	
		Hospital	10	
		Incidentals.....	68 68	
		Light	194 29	
		New construction.....	16 00	
		Officers travelling expenses	122 65	
		Ordinary repairs	974 99	
		Provisions	5,156 04	
		Rent.....	72 00	
		Stationery	69 75	
		Tools	217 45	
		Wharf and boat	56 21	
		Salaries and wages as follows:—		
		Warden	1,000 00	11,942 33

Total.....	23,480 00	720 00	9,767 67
Deputy Warden		1,600 00	
Two Chaplains		400 00	
Surgeon		400 00	
Steward		5,047 67	
Keepers, guards, etc.			
Total.....	23,480 00		23,480 00

W. R. HARRIS,
Accountant.

A. MACKENZIE,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 19.

STATEMENT of the Municipalities' Fund, 18th Vic., Cap. 2, and 19th Vic., Cap. 16, from 31st Dec., 1870, to 31st Dec., 1871.

PAYMENTS.	\$	cts.	RECEIPTS.	\$	cts.
To amount paid to the different Municipalities on account of distribution for twelve months ending 31st December, 1870, at the rate of 25 cents per head	62,891	50	By balance from 1870	71,975	63
To proportion of fund due to Townships in Lanark and Renfrow... ..	2,543	75	By gross receipts of Crown Lands Department for the twelve months ending 31st December, 1871.....	85,038	20
Do do do Perth	1,848	75			
Do do City of Hamilton	1,600	00			
To expenses of management on receipts, December 31st, 1871	17,007	64			
To refunds of 1871.....	554	49			
Balance	70,567	70		157,013	83
	157,013	83	By balance available for distribution in 1872.....	70,567	70

W. R. HARRIS,
Accountant.

A. MACKENZIE,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1871.

No. 20.

STATEMENT of payments made from Municipalities' Fund, 18th Vic., Cap. 2 and 19th Vic., Cap. 16, being distribution for 1870.

MUNICIPALITY.	COUNTY,	Rate. payers.	Amount.
			\$ cts.
Anglesea	Addington	25	6 25
Alfred	Prescott	309	77 25
Augusta	Grenville	925	231 25
Aurora	York	253	63 25
Adelaide	Middlesex	567	141 75
Ancaster	Wentworth	896	224 00
Albion	Peel	986	246 50
Arran	Bruce	662	165 50
Aldborough	Elgin	671	167 75
Ashfield	Huron	683	170 75
Anderdon	Essex	359	89 75
Alnwick	Northumberland	193	48 25
Arthur	Wellington	720	180 00
Asphodel	Peterborough	559	139 75
Albemarle and Eastnor	Bruce	93	23 25
Amabel	Bruce	256	64 00
Athol	Prince Edward	361	90 25
Amherstburg Town	Essex	482	120 50
Amherst Island	Adlington	207	51 75
Ananranth	Wellington	452	113 00
Ameliasburgh	Prince Edward	735	183 75
Adjala	Simcoe	502	125 50
Artemesia	Grey	822	205 50
Adolphustown	Lennox	164	41 00
Ashburnham	Peterborough	174	43 50
Bexley	Victoria	83	20 75
Brampton	Peel	452	113 00
Bertie	Welland	582	145 50
Barrie Town	Simcoe	528	132 00
Bath Village	Addington	124	31 00
Brant	Bruce	1,003	250 75
Berlin Town	Waterloo	482	120 50
Bosanquet	Lambton	705	176 25
Bedford	Frontenac	303	75 75
Belleville Town	Hastings	1,708	427 00
Brighton Village	Northumberland	247	61 75
Binbrook	Wentworth	360	90 00
Beutnick	Grey	928	232 00
Brock	Ontario	756	199 00
Bastard and Burgess	Leeds	732	183 00
Bruce	Bruce	633	153 25
Biddulph	Middlesex	762	190 50
Blenheim	Oxford	1,084	271 00
Barton	Wentworth	560	140 00
Brantford	Brant	1,228	307 00
Bowmanville Town	Durham	884	221 00
Blandford	Oxford	307	76 75
Bayham	Elgin	1,029	257 25
Beverly	Wentworth	1,082	270 50
Bothwell Town	Kent	203	50 75
Bradford Village	Simcoe	241	60 25
Burleigh, Anstruther, Chandos, Cardiff and Monmouth	Peterborough	143	35 75
Belmont	Peterborough	273	68 25
Brooke	Lambton	473	118 25
Burford	Brant	1,062	265 50
Brighton	Northumberland	652	163 00
Carried forward			7,921 25

STATEMENT of payments made from Municipalities' Fund, &c.—*Continued.*

MUNICIPALITY.	COUNTY.	Rate-payers.	Amount.
			\$ cts.
<i>Brought forward</i>			7,921 25
Barrie.....	Frontenac	111	27 75
Buchanan	Renfrew	25	6 25
Cashel	Hastings	16	4 00
Cambridge	Russell	118	29 50
Crosby North	Leeds	363	90 75
Clifton Town	Welland	364	91 00
Camden East	Addington	1,126	281 50
Clarke	Durham	1,136	284 00
Cayuga North	Haldimand	399	99 75
Cayuga South	Haldimand	161	40 25
Chinguacousy	Peel	1,117	279 25
Cornwall	Stormont	778	194 50
Caradoc	Middlesex	748	187 00
Camden and Dalton	Victoria	179	44 75
Clinton	Lincoln	518	129 50
Crosby South	Leeds	386	96 50
Cumberland	Russell	500	125 00
Colborne	Huron	410	102 50
Clinton Village	Huron	472	118 00
Crowland	Welland	279	69 75
Caledonia	Prescott	189	47 25
Collingwood Town	Simcoe	517	129 25
Caledonia Village	Haldimand	274	68 50
Clarendon and Miller	Frontenac	104	26 00
Collingwood	Grey	606	151 50
Caledon	Peel	877	219 25
Caistor	Lincoln	383	95 75
Clarence	Russell	394	98 50
Chatham and North Gore	Kent	960	240 00
Carrick	Bruce	747	185 75
Charlotteville	Norfolk	873	218 25
Charlottetown	Glengarry	1,044	261 00
Camden	Kent	677	169 25
Cayuga Village	Haldimand	151	37 75
Canborough	Haldimand	292	73 00
Cavan	Durham	955	238 75
Cornwall Town	Stormont	430	115 00
Colborne Village	Northumberland	153	38 25
Colchester	Essex	571	142 75
Cartwright	Durham	527	131 75
Culross	Bruce	631	157 75
Cramahe	Northumberland	614	153 50
Denbigh, Abinger and Ashby	Addington	79	19 75
Dorchester South	Elgin	494	123 50
Dunfries North	Waterloo	762	190 50
Dunville Village	Haldimand	378	94 50
Donro	Peterborough	514	128 50
Draper, Macauley, Ryde, Stephenson and Oakley	Victoria	383	95 75
Dunn	Haldimand	213	53 25
Delaware	Middlesex	326	81 50
Dummer	Peterborough	339	84 75
Derby	Grey	344	86 00
Dunfries South	Brant	630	157 50
Dover	Kent	541	135 25
Dorchester North	Middlesex	699	174 75
Darlington	Durham	1,096	274 00
Dawn	Lambton	206	51 50
Dunwich	Elgin	759	189 75
Dysart, Guildford, Dudley, Harburn, Harcourt and Briton	Peterborough	137	34 25

Carried forward

15,197 50

STATEMENT of payments made from Municipalities' Fund, &c.—*Continued.*

MUNICIPALITY.	COUNTY.	Rate- payers.	Amount.
			\$ cts.
<i>Brought forward</i>			15,197 50
Dereham	Oxford	943	235 75
Ernesttown	Addington	1,041	260 25
Edwardsburgh	Grenville	904	226 00
Elora Village	Wellington	302	75 50
Ekfrid	Middlesex	592	148 00
Euphrasia	Grey	542	135 50
Euphemia	Lambton	461	115 25
Eramosa	Wellington	571	142 75
Fscott Front of	Leeds	235	58 75
Ennismore	Peterborough	167	41 75
Eldon	Victoria	535	133 75
Embro	Oxford	138	34 50
Enniskillen	Lambton	251	62 75
Essa	Simcoe	694	173 50
Elmsley South	Leeds	230	57 50
Esquesing	Halton	1,044	261 00
Etobicoke	York	536	134 50
Erin	Wellington	823	205 75
Emily	Victoria	630	157 50
Elderslie	Bruce	688	172 00
Elzevir	Hastings	236	59 00
Egremont	Grey	697	174 25
Fredericksburgh North	Lennox	339	89 75
Fort Erie Village	Welland	163	40 75
Fitzroy	Carleton	526	131 50
Finch	Stormont	484	121 00
Flamborough West	Wentworth	675	168 75
Fredericksburgh South	Lennox and Addington	335	83 75
Fenelon	Victoria	664	166 00
Fergus Village	Wellington	226	56 50
Flamborough East	Wentworth	729	182 25
Flos	Simcoe	326	81 50
Guelph	Wellington	492	123 00
Georgina	York	287	71 75
Grey	Huron	756	189 00
Gananoque Village	Leeds	364	91 00
Gainsborough	Lincoln	552	138 00
Grantham	Lincoln	692	173 00
Gower South	Grenville	182	45 50
Garafraxa West	Wellington	524	131 00
Galt Town	Waterloo	969	242 25
Glenelg	Grey	717	179 25
Goderich	Huron	593	148 25
Greenock	Bruce	532	133 00
Grimsby	Lincoln	591	147 75
Gloucester	Carleton	937	231 25
Gwillimsbury North	York	370	92 50
Gwillimsbury East	York	853	218 25
Glandford	Wentworth	435	108 75
Gosfield	Essex	538	134 50
Garafraxa	Wellington	419	112 25
Gwilliamsbury West	Simcoe	649	160 00
Garden Island Village	Frontenac	130	32 50
Georgetown	Halton	205	51 25
Galway	Peterborough	116	29 00
Goulbourne	Carleton	501	125 25
Gower North	Carleton	406	101 50
Hinchinbrooke	Frontenac	163	40 75
Hope	Durham	943	235 75
Hillier	Prince Edward	472	118 00
Hullett	Huron	701	175 25
<i>Carried forward</i>			23,167 25

STATEMENT of payments made from Municipalities' Fund, &c.—*Continued.*

MUNICIPALITY.	COUNTY.	Rate-payers.	Amount.
			\$ cts.
<i>Brought forward.....</i>			23,167 25
Hawkesbury West.....	Prescott	348	87 00
Holland.....	Grey	620	155 00
Huntley.....	Carleton	418	104 50
Huntingdon.....	Hastings	512	128 00
Head.....	Renfrew	25	6 25
Hamilton.....	Northumberland...	1,100	275 00
Haldimand.....	Northumberland.....	900	225 00
Howard.....	Kent	889	222 25
Hay.....	Huron	590	147 50
Howick.....	Huron	971	242 75
Hawkesbury Village.....	Prescott.....	217	54 25
Hespeler Village.....	Waterloo	129	32 25
Humberstone.....	Welland	458	114 50
Houghton.....	Norfolk	372	93 00
Huron.....	Bruce	672	168 00
Hungerford.....	Hastings	813	203 25
Hallowell.....	Prince Edward	745	186 25
Holland Landing Village.....	York	133	33 25
Hawkesbury East.....	Prescott.....	812	203 00
Harwich.....	Kent	1,261	315 25
Harvey.....	Peterborough	121	30 25
Ingersoll Town.....	Oxford	841	210 25
Innisfil.....	Simcoe	1,005	251 25
Iroquois Village.....	Dundas	122	30 50
Keppel.....	Grey	461	115 25
Kemptville Village.....	Grenville	162	40 50
Kingston City.....	Frontenac	3,486	871 50
Kenyon.....	Glengarry	705	176 25
Kalador.....	Addington	138	34 50
Kinloss.....	Bruce	571	142 75
King.....	York	1,216	304 00
Kenebec.....	Frontenac	127	31 75
Kitley.....	Leeds	585	146 25
Kincardine.....	Bruce	711	177 75
Kingston.....	Frontenac	717	179 25
Kincardine Village.....	Bruce	353	88 25
Lindsay Town.....	Victoria	572	143 00
Lutterworth, Anson and Hindon.....	Victoria	121	30 25
Leeds and Lansdowne, Rear of.....	Leeds	451	112 75
Lobo.....	Middlesex	606	151 50
Lake.....	Hastings	41	10 25
Louth.....	Lincoln	329	82 25
Luther.....	Wellington	423	105 75
Longueuil.....	Prescott	252	63 00
Laxton, Digby and Longford.....	Victoria	167	41 75
Leeds and Lansdowne, Front of.....	Leeds	655	163 75
Lancaster.....	Glengarry	751	187 75
London.....	Middlesex	2,146	536 50
Lochiel.....	Glengarry	737	184 25
Loughboro'.....	Addington	428	107 00
Limerick.....	Hastings	46	11 50
Middleton.....	Norfolk	575	143 75
Markham.....	York	1,252	313 00
Mara.....	Ontario	545	136 25
Morrison.....	Simcoe	128	32 00
Milton.....	Halton	195	48 75
McKillop.....	Huron	653	163 25
Moulton and Sherbrooke.....	Haldimand	413	103 25
Madoc.....	Hastings	574	143 50
Mosa.....	Middlesex	546	136 50
Monaghan South.....	Durham	213	53 25
<i>Carried forward.....</i>			32,198 50

STATEMENT of payments made from Municipalities' Fund, &c.—Continued.

MUNICIPALITY.	COUNTY.	Rate-payers.	Amount.
<i>Brought forward.....</i>			\$ st. 32,198 5
Murray.....	Northumberland.....	705	170 25
Mount Forest Village.....	Wellington.....	265	66 25
Mulmur.....	Simcoe.....	616	154 00
Morrisburgh.....	Dundas.....	204	51 00
Malden.....	Essex.....	293	73 25
Muskok.....	Simcoe.....	91	23 50
Metcalfe.....	Middlesex.....	134	134 00
Marmora.....	Hastings.....	328	82 00
March.....	Carleton.....	211	52 75
Marysburgh.....	Prince Edward.....	768	192 00
Monck.....	Muskoka.....	112	28 00
Moore.....	Lambton.....	836	209 00
Medonte.....	Simcoe.....	475	118 75
Mersea.....	Essex.....	535	133 75
Malahide.....	Elgin.....	1,046	261 50
Marlborough.....	Carleton.....	360	90 00
Mountain.....	Dundas.....	563	140 75
Mariposa.....	Victoria.....	980	245 00
Melancthon.....	Grey.....	294	73 50
Maidstone.....	Essex.....	478	119 50
Manvers.....	Durham.....	648	162 00
Maryborough.....	Wellington.....	711	177 75
Morris.....	Huron.....	678	169 50
Minden.....	Peterborough.....	152	38 00
Merrickville Village.....	Grenville.....	153	38 25
Monaghan North.....	Peterborough.....	236	59 00
Minto.....	Wellington.....	817	204 25
Matilda.....	Dundas.....	796	199 00
McGillivray.....	Middlesex.....	935	233 75
Mono.....	Simcoe.....	663	165 75
Methuen.....	Peterborough.....	22	5 50
Newmarket Village.....	York.....	328	82 00
New Edinburgh.....	Carleton.....	167	26 75
Napanee Town.....	Lennox.....	543	135 75
Nissouri East.....	Oxford.....	637	159 25
Nassagaweya.....	Halton.....	518	129 50
Nichol.....	Wellington.....	531	132 75
Nissouri West.....	Middlesex.....	655	163 75
Niagara.....	Lincoln.....	503	125 75
Nepean.....	Carleton.....	726	181 50
Nottawasaga.....	Simcoe.....	1,185	296 25
Normanby.....	Grey.....	1,043	250 75
Newburgh Village.....	Addington.....	154	38 50
New Hamburg Village.....	Waterloo.....	206	51 50
Newcastle Village.....	Durham.....	201	50 25
Nelson.....	Halton.....	800	200 00
Osnabrock.....	Stormont.....	1,056	264 00
Olden.....	Frontenac.....	138	34 50
Oakville Town.....	Halton.....	414	103 50
Oshawa Village.....	Ontario.....	665	166 25
Oxford.....	Grenville.....	743	185 75
Orillia Village.....	Simcoe.....	248	62 00
Osprey.....	Grey.....	580	145 00
Orford.....	Kent.....	569	142 25
Oakland.....	Brant.....	196	49 00
Onondaga.....	Brant.....	309	77 25
Oxford East.....	Oxford.....	455	113 75
Orillia and Matchedash.....	Simcoe.....	305	76 25
Otonabee.....	Peterboro.....	717	179 25
Oxford West.....	Oxford.....	486	121 50
<i>Carried forward.....</i>			39,830 50

STATEMENT of payments made from Municipalities' Fund, &c.—*Continued.*

MUNICIPALITY.	COUNTY.	Rate-payers.	Amount.
<i>Brought forward.</i>			\$ cts. 39,830 50
Oxford North.....	Oxford	301	75 25
Osgoosh.....	Carleton	778	194 50
Oil Springs Village.....	Lambton	238	59 50
Oneida.....	Haldimand	517	129 25
Oro.....	Simcoe	716	179 00
Oso.....	Frontenac	89	22 25
Owen Sound Town.....	Grey	811	202 75
Orangeville.....	Wellington	229	57 25
Percy.....	Northumberland	663	165 75
Portsmouth Village.....	Frontenac	268	67 00
Preston Village.....	Waterloo	273	68 25
Plympton.....	Lambton	903	225 75
Pittsburgh and Howe Island.....	Frontenac	740	185 00
Port Dalhousie Village.....	Lincoln	193	48 25
Pilkington.....	Wellington	499	124 75
Plantagenet South.....	Prescott	295	73 75
Lickering.....	Ontario	1,237	309 25
Proton.....	Grey	420	105 00
Pictou Town.....	Prince Edward	531	132 75
Puslinch.....	Wellington	756	189 00
Paris Town.....	Brant	727	181 75
Peel.....	Wellington	1,048	262 00
Plantagenet North.....	Prescott	567	141 75
Petrolia Village.....	Lambton	323	80 75
Pelham.....	Welland	541	135 25
Portland.....	Frontenac	594	148 50
Port Colborne Village.....	Welland	181	45 25
Romney.....	Kent	137	34 25
Rainham.....	Haldimand	372	93 00
Raleigh.....	Kent	760	190 00
Rochester.....	Essex	340	85 00
Roxborough.....	Stormont	565	141 25
Russell.....	Russell	380	95 00
Reach.....	Ontario	1,351	337 75
Richmond.....	Lennox	865	216 25
Rawdon.....	Hastings	602	150 50
Richmond Village.....	Carleton	92	23 00
Rama.....	Ontario	140	35 00
Shedfield.....	Addington	535	133 75
Stanhope.....	Peterborough	55	13 75
Sarawak and Town plot of Brooke.....	Grey	141	35 25
Seaforth Village.....	Huron	375	93 75
Stanley.....	Huron	609	152 25
Sarnia.....	Lambton	474	118 50
St. Thomas Town.....	Elgin	414	103 50
Sterling.....	Hastings	146	36 50
Sophiasburg.....	Prince Edward	527	131 75
Sarnia Town.....	Lambton	568	142 00
Seneca.....	Haldimand	535	133 75
St. Vincent.....	Grey	915	228 75
Stephen.....	Huron	667	166 75
Southampton Village.....	Bruce	145	35 25
Scott.....	Ontario	606	151 50
Streetsville Village.....	Peel	129	32 25
Sunnidale.....	Simcoe	291	72 75
Sombra.....	Lambton	527	131 75
Sandwich Town.....	Essex	213	53 25
Snowden.....	Peterborough	85	21 25
Stamford.....	Welland	577	144 25
Saugeen.....	Bruce	511	127 75
Sandwich East.....	Essex	585	146 25
<i>Carried forward.</i>			47,248 50

STATEMENT of payments made from Municipalities' Fund, &c.—*Continued.*

MUNICIPALITY.	COUNTY.	Rate-payers.	Amount.
			\$ cts.
<i>Brought forward</i>			47,248 50
Saltfleet.....	Wentworth.....	543	135 75
Sidney.....	Hastings.....	1,037	259 25
Seugog.....	Ontario.....	118	29 50
Smith.....	Peterborough.....	591	147 75
Scarboro'.....	York.....	1,033	258 25
Somerville.....	Victoria.....	187	46 75
Southwold.....	Elgin.....	1,093	273 25
Sydenham.....	Grey.....	670	167 50
Storrington.....	Frontenac.....	516	129 00
Sandwich West.....	Essex.....	394	98 50
Seymour.....	Northumberland.....	739	184 75
Strathroy Village.....	Middlesex.....	615	153 75
Tecumseth.....	Simcoe.....	782	195 50
Townsend.....	Norfolk.....	1,050	262 50
Toronto City.....	York.....	16,047	4,011 75
Toronto Gore.....	Peel.....	315	78 75
Thorold.....	Welland.....	492	123 00
Tilbury West.....	Essex.....	375	93 75
Tuckersmith.....	Huron.....	566	141 50
Thorah.....	Ontario.....	389	97 25
Tay.....	Simcoe.....	218	54 50
Tossorontio.....	Simcoe.....	202	50 50
Thurlow.....	Hastings.....	1,127	281 75
Tilbury East.....	Kent.....	390	97 50
Tiny.....	Simcoe.....	504	126 00
Trenton Village.....	Hastings.....	347	86 75
Toronto Township.....	Peel.....	1,190	297 50
Tudor, Wollaston and Limerick.....	Hastings.....	232	58 00
Torbolton.....	Carleton.....	110	27 50
Thorold Village.....	Welland.....	334	83 50
Tyendinaga.....	Hastings.....	1,288	322 00
Trafalgar.....	Halton.....	928	232 00
Turnberry.....	Huron.....	521	130 25
Tudor.....	Hastings.....	129	32 25
Usborne.....	Huron.....	607	151 75
Uxbridge.....	Ontario.....	821	205 25
Vaughan.....	York.....	1,121	280 25
Vienna Village.....	Elgin.....	171	42 75
Verulam.....	Victoria.....	521	130 25
Vespra.....	Simcoe.....	410	102 50
Wolford.....	Grenville.....	521	130 25
Wellington Village.....	Prince Edward.....	124	31 00
Whitby West.....	Ontario.....	735	183 75
Wolfe Island.....	Frontenac.....	541	135 25
Williams West.....	Middlesex.....	652	163 00
Whitby Town.....	Ontario.....	550	137 50
Whitby East.....	Ontario.....	686	171 50
Walpole.....	Haldimand.....	1,060	265 00
Whitchurch.....	York.....	850	212 50
Woolwich.....	Waterloo.....	910	227 50
Wainfleet.....	Welland.....	467	116 75
Wardsville Village.....	Middlesex.....	97	24 25
Waterloo.....	Waterloo.....	1,254	313 50
Wawanosh West.....	Huron.....	501	125 25
Welland Village.....	Welland.....	268	67 00
Wellesley.....	Waterloo.....	918	229 50
Walsingham.....	Norfolk.....	962	240 50
Williams East.....	Middlesex.....	539	134 75
Winchester.....	Dundas.....	696	174 00
Warwick.....	Lambton.....	926	231 50
Wilmot.....	Waterloo.....	838	209 50
<i>Carried forward</i>			60,453 00

STATEMENT of payments made from Municipalities' Fund, &c.—*Concluded.*

MUNICIPALITY.	COUNTY.	Rate-payers.	Amount.
			\$ cts.
<i>Brought forward</i>			60,453 00
Westminster.....	Middlesex.....	1,196	299 00
Willoughby.....	Welland.....	235	58 75
Waterloo Village.....	Waterloo.....	360	90 00
Windsor Town.....	Essex.....	903	225 75
Williamsburgh.....	Dundas.....	772	193 00
Wawanosh East.....	Huron.....	418	104 50
Wollaston.....	Hastings.....	41	10 25
Yonge and Escott, Rear of.....	Leeds.....	408	102 00
York.....	York.....	1,808	452 00
Yonge, Front of.....	Leeds.....	313	78 25
Yarmouth.....	Elgin.....	1,250	312 50
Yorkville Village.....	York.....	435	108 75
Zorra West.....	Oxford.....	608	152 00
Zone.....	Kent.....	235	58 75
Zorra East.....	Oxford.....	772	193 00
		251,566	62,891 50
County of Perth.....	For municipalities therein, by transfer to Municipal Loan Fund.....	7,395	1,848 75
U. C. Lanark and Renfrew.....	For municipalities therein, by transfer to Municipal Loan Fund.....	10,175	2,543 75
Hamilton City.....	Its proportion transferred to Interest account.....	6,400	1,600 00
		275,536	68,884 00

W. R. HARRIS,
Accountant.

A. MACKENZIE,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 21.

DETAILED STATEMENT of expenditure on account of Education, for the year ended 31st December, 1871.

TO WHOM PAID.		CITIES, TOWNS, VILLAGES AND SCHOOL SECTIONS.		\$	cts.	\$	cts.
		HIGH SCHOOLS.					
Treasurer	County of Brant			2,026	00		
Do	Bruce			536	00		
Do	Carleton			656	00		
Do	Essex			688	00		
Do	Elgin			1,448	00		
Do	Grey			680	00		
Do	Haldimand			1,304	00		
Do	Halton			808	00		
Do	Hastings			1,892	00		
Do	Huron			1,336	00		
Do	Kent			716	00		
Do	Lambton			336	00		
Do	Lanark			2,116	00		
Do	Leeds and Grenville			2,778	00		
Do	Lennox and Addington			2,498	00		
Do	Lincoln			2,900	00		
Do	Middlesex			964	00		
Do	Northumberland and Durham			5,520	00		
Do	Norfolk			1,694	00		
Do	Ontario			5,378	00		
Do	Oxford			668	00		
Do	Peel			1,482	00		
Do	Perth			1,342	00		
Do	Peterboro'			3,712	00		
Do	Prescott and Russell			1,192	00		
Do	Prince Edward			882	00		
Do	Renfrew			1,178	60		
Do	Simcoe			1,586	00		
Do	Stormont, Dundas and Glengarry			2,574	00		
Do	Victoria			1,612	00		
Do	Waterloo			2,322	00		
Do	Welland			2,558	00		
Do	Wellington			1,950	00		
Carried forward				59,332	00		

Education Statement... Continued.

TO WHOM PAID.	CITIES, TOWNS, VILLAGES AND SCHOOLS, SECTION 4.	\$	cts.	\$	cts.
	<i>Brought forward.....</i>	59,332	00		
	HIGH SCHOOLS—Continued.				
Do r	County of Wentworth	1,652	00		
Treasurer	do York	2,870	00		
Do	City of Hamilton	1,882	00		
Do	do Kingston	1,228	00		
Do	do London	664	00		
Do	do Ottawa	904	00		
	do Toronto	1,452	00		
				69,986	00
	PUBLIC SCHOOLS.				
Do	County of Brant	2,185	00		
Do	do Bruce	4,734	00		
Do	do Carleton	3,227	00		
Do	do Elgin	3,356	00		
Do	do Essex	2,450	00		
Do	do Frontenac	2,781	00		
Do	do Grey	6,036	00		
Do	do Haldimand	2,441	00		
Do	do Halton	2,049	00		
Do	do Hastings	3,222	00		
Do	do Huron	6,858	00		
Do	do Kent	3,203	00		
Do	do Lambton	3,308	00		
Do	do Lanark	3,202	00		
Do	do Leeds and Grenville	5,675	00		
Do	do Lennox and Addington	2,584	00		
Do	do Lincoln	2,038	00		
Do	do Middlesex	6,872	00		
Do	do Norfolk	3,301	00		
Do	do Northumberland and Durham	7,499	00		
Do	do Ontario	4,503	00		
Do	do Oxford	4,079	00		
Do	do Peel	2,056	00		
Do	do Perth	4,125	00		
Do	do Peterboro'	2,646	00		
Do	do Prescott and Russell	2,406	00		

[illegible]

Education Statement.—Continued.

TO WHOM PAID.	CITIES, TOWNS, VILLAGES AND SCHOOL SECTIONS.	%		cts.		%		cts.	
		%		cts.		%		cts.	
	<i>Brought forward</i>			154,904 00				69,986 00	
	PUBLIC SCHOOLS.—Continued.								
Treasurer	Town of St. Marys.....			286 00					
Do	do St. Thomas.....			183 00					
Do	do Stratford.....			277 00					
Do	do Whitby.....			238 00					
Do	do Windsor.....			359 00					
Do	do Woodstock.....			401 00					
Do	Village of Arnprior.....			143 00					
Do	do Ashburnham.....			123 00					
Do	do Aurora.....			132 00					
Do	do Bath.....			60 00					
Do	do Bradford.....			123 00					
Do	do Brampton.....			179 00					
Do	do Brighton.....			125 00					
Do	do Caledonia.....			111 00					
Do	do Cayuga.....			86 00					
Do	do Chippewa.....			136 00					
Do	do Clinton.....			179 00					
Do	do Colborne.....			86 00					
Do	do Dunnville.....			163 00					
Do	do Elora.....			177 00					
Do	do Embro.....			68 00					
Do	do Fergus.....			148 00					
Do	do Fort Erie.....			97 00					
Do	do Gananoque.....			173 00					
Do	do Garden Island.....			60 00					
Do	do Georgetown.....			165 00					
Do	do Hawkesbury.....			118 00					
Do	do Hespeler.....			129 00					
Do	do Holland Landing.....			75 00					
Do	do Iroquois.....			72 00					
Do	do Kenneville.....			129 00					
Do	do Kincardine.....			183 00					
Do	do Lanark.....			82 00					
Do	do Listowel.....			129 00					
Do	do Merrickville.....			107 00					
Do	do Mitchell.....			193 00					
Do	do Morrisburg.....			125 00					

Do	Mount Forest	132 00	
Do	Newburgh	95 00	
Do	Newcastle	80 00	
Do	New Edinburgh	50 00	
Do	New Hamburg	118 00	
Do	Newmarket	128 00	
Do	Oilsprings	132 00	
Do	Orangeville	90 00	
Do	Orillia	136 00	
Do	Oshawa	202 00	
Do	Pembroke	45 00	
Do	Petrolia	154 00	
Do	Portsmouth	85 00	
Do	Port Colborne	62 00	
Do	Village of Port Dalhousie	125 00	
Do	Preston	119 00	
Do	Renfrew	61 00	
Do	Richmond	54 00	
Do	Seaford	143 00	
Do	Smith's Falls	86 00	
Do	Sterling	82 00	
Do	Strathroy	183 00	
Do	Streetsville	72 00	
Do	Thorold	146 00	
Do	Trenton	124 00	
Do	Vienna	86 00	
Do	Wardsville	72 00	
Do	Waterloo	171 00	
Do	Welland	114 00	
Do	Wellington	54 00	
Do	Yorkville	183 00	
		163,904 00	
Trustees	City of Hamilton	409 00	
Do	do Kingston	358 00	
Do	do London	225 00	
Do	do Ottawa	786 00	
Do	do Toronto	1,649 00	
Do	Town of Amherstburgh	99 00	
Do	do Barrie	74 00	
Do	do Belleville	193 00	
Do	do Brockville	97 00	
Do	do Berlin	33 00	
Do	do Brantford	90 00	
Do	do Clifton	48 00	
Do	do Cobourg	103 00	
Do	do Chatham	56 00	
		4,220 00	
		163,904 00	
		69,986 00	

SEPARATE SCHOOLS.

Carried forward

Education Statement.—Continued.

TO WHOM PAID.	CITIES, TOWNS, VILLAGES AND SCHOOLS SECTIONS.	\$ cts.		
		\$	cts.	cts.
	<i>Brought forward.....</i>	4,220 00	163,904 00	69,985 00
	SEPARATE SCHOOLS—Continued.			
Trustees.....	Town of Dundas.....			
Do	do Guelph.....	89 00		
Do	do Ingersoll.....	159 00		
Do	do Lindsay.....	65 00		
Do	do Niagara.....	126 00		
Do	do Oakville.....	59 00		
Do	do Picton.....	61 00		
Do	do Prescott.....	59 00		
Do	do Paris.....	107 00		
Do	do Peterborough.....	58 00		
Do	do Perth.....	133 00		
Do	do Samia.....	65 00		
Do	do St. Marys.....	58 00		
Do	do St. Catharines.....	61 00		
Do	do Stratford.....	308 00		
Do	do Whitby.....	69 00		
Do	Village of Elora.....	62 00		
Do	do Perkasie.....	28 00		
Do	do Newmarket.....	16 00		
Do	do Oshawa.....	39 00		
Do	do Port Colborne.....	64 00		
Do	do Preston.....	47 00		
Do	do Portsmouth.....	27 00		
Do	do Smith's Falls.....	38 00		
Do	do Thorold.....	30 00		
Do	do Trenton.....	56 00		
Do	do Mount Forest.....	83 00		
Do	School Sections:	14 00		
Do	1 Arthur.....	27 00		
Do	3 and 4 Anderson.....	32 00		
Do	6 Arthur.....	56 00		
Do	3 do.....	39 00		
Do	4 do.....	33 00		
Do	4 Asphodel.....	25 00		
Do	2 Bedford.....	27 00		
Do	5 Brizleton.....	21 00		
Do	16 Biddulph.....	32 00		

Do	9	do	and McGillivray	25 00
Do	3	Bromley	.....	47 00
Do	15	Camden East	.....	17 00
Do	6	Carrick	.....	32 00
Do	2	do	.....	34 85
Do	15	Charlottenburgh	.....	13 00
Do	16	do	.....	54 00
Do	17	do	.....	26 00
Do	7	Dalhousie	.....	12 00
Do	9	Dawrie	.....	60 00
Do	2	Edwardsburgh	.....	30 00
Do	7	Ellice	.....	16 00
Do	6	Etobicoke	.....	13 00
Do	4	Elzevir	.....	5 00
Do	6	Flamboro' East	.....	20 35
Do	do	West	.....	31 00
Do	2	Glenelg	.....	25 00
Do	5	Glenelg	.....	38 00
Do	7	Glenelg and Ardenesia	.....	12 00
Do	1	and 4 Gloucester, and 3 Osgoode	.....	26 00
Do	7	Grantlath	.....	36 00
Do	1	Grattan	.....	54 00
Do	9	Harwick	.....	26 00
Do	9	Howard	.....	10 00
Do	14	Hungerford	.....	5 00
Do	21	Haldimand	.....	28 00
Do	4	Hawkesbury East	.....	37 00
Do	7	do	.....	33 00
Do	15	do	.....	7 00
Do	2	do	.....	37 00
Do	16	do	.....	15 00
Do	3	Holland	.....	30 00
Do	2	Hullett	.....	23 00
Do	8	Kingston	.....	30 00
Do	7	Kitley	.....	14 00
Do	7	Lancaster	.....	9 00
Do	14	do	.....	22 00
Do	13	do	.....	10 00
Do	10	Lochiel	.....	86 00
Do	12	do	.....	10 00
Do	1	Longueuil	.....	28 00
Do	5	Mara	.....	17 00
Do	5	Marlborough	.....	18 00
Do	3, 4, 5	Moore	.....	92 00
Do	4	Mornington	.....	13 00
Do	7	Nepcan	.....	38 00
Do	13	do	.....	7 00
Do	2	Normanby	.....	3 00
Do	10	do	.....	25 00
Carried forward				7,723 20
				183,904 00
				69,986 00

Education Statement.—Continued.

TO WHOM PAID.	CITIES, TOWNS, VILLAGES, AND SCHOOL SECTIONS.		
	§	cts.	cts.
	7,723 20	163,904 00	61,986 00
<i>Brought forward.</i>			
SEPARATE SCHOOLS.—Continued.			
School Sections:—			
Trustees.....			19 00
Do.....			16 00
Do.....			25 00
Do.....			32 00
Do.....			7 00
Do.....			25 00
Do.....			23 00
Do.....			37 00
Do.....			32 00
Do.....			54 00
Do.....			23 00
Do.....			37 00
Do.....			23 00
Do.....			29 96
Do.....			46 00
Do.....			16 00
Do.....			15 00
Do.....			20 00
Do.....			36 00
Do.....			51 00
Do.....			60 00
Do.....			6 00
Do.....			29 00
Do.....			30 00
Do.....			24 00
Do.....			34 00
Do.....			15 00
Do.....			7 00
Do.....			13 00
Do.....			27 00
Do.....			26 00
Do.....			54 00
Do.....			58 00
Do.....			13 00
Do.....			22 00
Do.....			31 00

Do	1 do	42 00	9,081 16	172,935 16
Do	6 do	11 00		
Do	13 Westminster	18 00		
Do	11 Wellesley	50 00		
Do	9 and 10 do	48 00		
Do	4 Yonge and Escott Rear	10 00		
Do	21 York	30 00		
Do	22 do	48 00		
Do	6 do	37 00		
Do	1 do	36 00		
POOR SCHOOLS.				
Treasurer	County of Addington	150 00		
Do	do Bruce	300 00		
Do	do Carleton	755 00		
Do	do Essex	90 00		
Do	do Frontenac	545 00		
Do	do Grey	470 00		
Do	do Hastings	600 00		
Do	do Kent	30 00		
Do	do Lanark	235 00		
Do	do Leeds and Grenville	40 00		
Do	do Norfolk	90 00		
Do	do Northumberland	100 00		
Do	do Peterborough	600 00		
Do	do Renfrew	385 00		
Do	do Simcoe	685 00		
Do	do Victoria	615 00		
Do	do Wellington	30 00		
Do	School at Parry Sound	100 00		
Trustees	No. 1 Howland	70 00		
	Manitowaning	100 00		
				5,990 00
SUPERANNUATED TEACHERS.				
Hon. E. B. Wood	To pay:—			
	Ansley, J	38 00		
	Armstrong, James	54 33		
	Ashbury, C. R.	88 00		
	Benson, William	49 67		
	Beaty, R.	43 84		
	Brown, Jno.	56 67		
	Baldwin, Thomas	26 34		
	Bodfish, James	42 67		
	Baker, Thomas	40 33		
	Buchanan, Thomas	42 67		
	Bartley, Henry	49 67		
	Carried forward	532 19		248,961 16

Education Statement—Continued.

TO WHOM PAID.	SERVICE.	cts.		cts.		cts.	
		\$		\$		\$	
	<i>Brought forward</i>	532	19			248,961	16
SUPERANNUATED TEACHERS—Continued.							
To pay:—							
	Brown, James	60	16				
	Brown, William.....	26	34				
	Barber, E.	39	17				
	Beaton, William	33	34				
	Briggs, James	82	33				
	Benton, James	54	33				
	Breckanridge, J.	70	67				
	Biggan, J. L.	51	33				
	Bel, William	21	67				
	Callaghan, Daniel, for 1870, 1871.....	132	00				
	Colville, John.....	35	67				
	Currie, D.	38	00				
	Corrie, William.....	35	67				
	Clarke, William.....	24	00				
	Cameron, John	31	00				
	Clarke, M.	32	16				
	Campbell, R.	68	33				
	Calder, D.	54	33				
	Cozens, E.	59	00				
	Crawford, Mary	31	00				
	Donald, John	43	84				
	Dermott, William.....	26	33				
	Devereux, M.	49	67				
	Dods, John	45	00				
	Douglas, John.....	47	33				
	Dorothy, Thomas	75	33				
	Dennan, James	83	50				
	Ederington, M.	42	67				
	Fagan, Nicholas	26	34				
	Fletcher, John	38	00				
	Forde, James	38	00				
	Foster, W.	47	33				
	Fitzpatrick, Peter	48	67				
	Ferguson, William	52	00				
	Flanagan, Thomas.....	42	67				
	Fraser, Alexander.....	28	67				
	Grafé, T. J.	38	00				

Gibson, G.	40 33
Gillespie, Adam	52 00
Graydon, John	66 00
Graydon, William	39 17
Hutchins, M.	47 33
Healy, John	56 67
Hick, W.	54 33
Hildyard, William	40 33
Hamilton, R.	33 34
Irvine, William	160 00
Jenkins, Alexander	38 00
Judge, Charles	35 67
Jordan, R.	61 33
Kearns, William	54 33
Kee, David	35 67
Kennedy, G.	47 33
Keloe, James	40 33
Leys, James	35 67
Lenaten, John	36 00
Lewis, William	48 50
Mahon, James	42 66
Mozier, C.	59 00
Mulhern, P. G.	63 67
Monaghan, John	31 00
Middleton, Alexander	42 67
Millar, William	19 33
Miskelly, John	25 16
Miller, Alexander	62 50
McDougall, D.	28 67
McQueen, J.	48 50
McCormick, A.	33 33
McLaren, H.	45 00
McDonell, John	28 67
McCallum, R.	49 67
McGillis, A.	49 67
McGil, D.	61 33
McKay, A.	38 00
McDonald, A.	73 17
McLeod, N.	33 34
McRae, H.	42 67
McGrane, W. P., including balance of 1870.	91 20
McFarlane, J.	59 00
McSween, Arch.	4 00
Novlan, John	52 00
O'Kane, M.	43 84
Irco, J.	52 00
lover, A.	35 67
Reynolds, G.	62 50
Richards, M.	73 60
Carried forward	4,662 59
	248,961 16

Education Statement.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.
E. B. Wood.....	<i>Brought forward</i>	4,662	59	248,961	16

SUPERANNUATED TEACHERS.—Continued.

To pay:—

Russell, John.....

Ryan, E.....

Redmond, E.....

Robinson, J.....

Russell, S.....

Ross, J.....

Roberts, J.....

Stewart, P.....

Sudler, C.....

Sheehan, D. S.....

Saunders, T.....

Shiriff, P.....

Thornhill, W. R.....

Tucker, J.....

Thomson, J. D.....

Tindall, J.....

Vett, J.....

Van Every, J. C.....

Williams, W. B. P.....

Wilson, George.....

White, T.....

Webster, J.....

Wing, D.....

Weston, G.....

Woods, B.....

Whitfield, T.....

Younmans, R.....

Younghusband, J.....

Total Pensions.....

Add Subscription returned, John Strachan.....

Do

Catharine Jennings.....

6,143 88

LIBRARIES, APPARATUS AND PRIZES.

J. D. Triggs.....	Books, &c.	2,134 22
T. Nelson & Sons	do	2,105 60
Brewer and Tileston	do	866 10
T. S. Brown.....	do	2,423 58
Wm. F. Nimmo	do	1,702 73
A. Strachan & Co.....	do	280 90
Sampson, Low & Co.....	do	830 00
Milner and Sowerby	do	122 34
A. F. Potter.....	do	736 79
Woolworth, Ainsworth & Co.....	do	95 49
Dodd & Mead	do	275 83
Chas. Scribner & Co.....	do	14 80
Ward, Locke & Tyler	do	92 48
E. Steiger.....	do	9 46
Cassell, Petter & Galpin	do	838 12
Wm. Tegg	do	490 47
James Blackwood & Sons.....	do	828 35
Longmans, Green & Co.....	do	367 59
Joseph Tarn.....	do	829 07
George Philip & Son	do	92 99
W. & A. K. Johnston	do	455 00
Hodder & Stoughton	do	732 64
S. L. Roberts	do	24 00
Charles Griffin & Co.....	do	438 12
A. & C. Black.....	do	233 00
Morgan, Chase & Co.....	do	56 37
F. Warne & Co.....	do	1,344 29
Smith & Co.....	do	193 76
James Nisbet & Co.....	do	342 96
W. and R. Chambers	do	243 34
Johnston, Hunter & Co.....	do	155 93
W. W. Gardner.....	do	97 92
D. & J. Sadlier & Co.....	do	18 42
Houlston & Sons.....	do	94 71
A. S. Barnes & Co.....	do	119 81
Harper, Brothers	do	499 27
Hon. H. Barnard	do	109 48
John G. Witte & Brothers.....	do	612 15
J. Lippincott & Co.....	do	328 34
John Lovell	do	654 28
James Campbell & Son.....	do	452 55
Brown, Brothers.....	do	161 72
A. Drelge & Co.....	do	112 28
Adam Miller	do	549 05
Rev. S. Rose	do	7 50
R. Worthington	do	884 09
Chas. Potter.....	Instruments	1,291 74
Carried forward.....		25,369 72

255,105 04

Education Statement—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.
	<i>Brought forward.....</i>	25,369 72			255,105 04
J. T. Rolph	Seals	129 80			
H. F. Sifton	Music Diagrams	20 00			
Gorrie & Parish	Brushes	42 00			
R. A. Wood	Chemicals	13 10			
W. H. Sparrow	Hardware	8 67			
Sundry persons	Sundries	7 86			
Junter, Rose & Co.	Printing	748 46			
J. G. Hodgins	Reconstructing Maps	533 98			
S. P. May	Coloring Maps	486 20			
Copp, Clarke & Co.	Lithographing, &c.	2,448 00			
R. Canton	Engraving	94 01			
J. B. Carter	Map Mounting	2,053 67			
John Rogers	Carpenter work	415 70			
McPherson, Ross, & Co.	Forwarding	45 85			
E. J. Potter	do	1,062 43			
N. Mehan	do	265 32			
J. Sheldon	Freight and Cartage	8 22			
Collector of Customs, Toronto.....	Customs' Duties	1,096 63			34,949 02
	MUSEUM.				
Brewer & Tileston	Books, &c.	18 87			
Hon. H. Barnard	do	74 98			
Chas. Griffin & Co.	do	46 85			
A. Piddington	do	25 31			
A. F. Potter	do	314 02			
Dodd & Mead	Chromos	43 16			
S. E. Roberts	Frames, &c.	333 60			
John B. Carter	do	336 65			
S. P. May	Repairs to Statuary	99 00			
John L. Corrin	Tables	13 10			
J. McCausland	Stained Glass Lights	54 00			
E. J. Potter	Plate-glass	975 31			
Charles Potter	Brass Rods, &c.	223 50			
T. A. Wood	Chemicals	4 95			
J. H. Sangster	Collection of Insects.....	110 00			

John Rogers.....	Carpenter Work	316 76
George Chaffey & Brothers.....	Fuel	16 00
J. Snarr.....	do	30 00
P. Burns.....	do	275 00
Hunter, Rose, & Co.	Printing	144 94
A. Dredge & Co.....	Binding	15 10
Sundry Newspapers	Subscription	31 30
Collector of Customs, Toronto.....	Customs' Duties.....	139 45
PUBLIC SCHOOL INSPECTION.		
Edon. E. B. Wood	To pay Alexander, Wm.....	272 50
	Agnew, Jno., M.D.....	300 00
	Agar, Thos. S.....	175 00
	Brown, Jas. C.....	265 00
	Blair, Rev. Geo., M.A.....	232 50
	Biggs, W. R.....	225 00
	Burrows, F.....	270 00
	Brebnct, Jno.....	160 00
	Butler, A. F.....	247 50
	Beal, Jas.....	97 50
	Ball, Jas. H., M.A.....	230 00
	Carlyle, Wm.....	275 00
	Dewar, Archd.....	207 50
	Freer Benj.....	180 00
	Fotheringham, David.....	200 00
	Ferguson, W.....	237 50
	Ferguson, Rev. W., A.M.....	202 50
	Fordyce, A. D.....	230 00
	Girardot, T.....	110 00
	Glaslan, J. C.....	260 00
	Groat, S. P.....	252 50
	Gordon, Thos.....	270 00
	Garrett, Rev. Thos.....	135 00
	Hodgson, Jas.....	212 50
	Harrison B. B.....	265 00
	Harcourt, Richard, M.A.....	200 00
	Jenkins, Rev. E. H.....	280 00
	Johnson, Jno.....	200 00
	Kinney, Robt.....	227 50
	Kilgour, Rev. J.....	170 00
	Knight, Jas. H.....	130 00
	Kelly, M. J., M.D.....	175 00
	Little, Robt.....	155 00
	Langdon, R. V.....	105 00
	Morgan, J. C., M.A.....	247 50
	McNaughton, Alex.....	180 00
	McBrien, Jas.....	287 50
		7,390 00
Carried forward.....		293,895 94

Education Statement.—Continued.

TO WHOM PAID.	SERVICE.	\$	cts.	\$	cts.	\$	cts.
	<i>Brought forward</i>	7,930	00			293,805	9
	PUBLIC SCHOOL INSPECTION.—Continued.						
To pay:—	McKinnon, Donald.....	205	00				
Hon. E. B. Wood.....	May, Rev. Jno., M.A.	237	50				
	McKee, Rev. W.	232	50				
	Miller, J. R.	195	00				
	Platt, G. D.	217	50				
	Pearce, Thos.	260	00				
	Ross, Geo. W.	165	00				
	Ross, A. W.	195	00				
	Reazin, Hy.	185	00				
	Slack, H. L., M.A.	300	00				
	Steele, Thos. O.	150	00				
	Somersct, Jno. B.	185	00				
	Smith, Jos. H.	130	00				
	Scarlett, Edwd.	280	00				
	Tilley, Jno. J.	272	50				
	Wadsworth, Jas J., M.D.	267	50			11,527	50
	GRAMMAR SCHOOL INSPECTION.						
	Expenditure on account of this service as per Statement No. 12, page 63.....					2,999	98
	JOURNAL OF EDUCATION.						
	Expenditure as per Statement No. 12, page 63					2,370	59
	COLLEGIATE INSTITUTES.						
	Expenditure as per Statement No. 12, page 63.....					1,500	00

PREPARING EXAMINATION PAPERS PUBLIC SCHOOL
TEACHERS.

Expenditure as per Statement No. 12, page 63.....

600 00

DEPOSITORY.

Salaries as per Statement No. 12, page 63.....
do 13, do 84.....

3,403 75
1,571 25

4,975 00

NORMAL AND MODEL SCHOOLS.

Salaries as per Statement No. 12, page 63.....
do 13, do 83.....

11,811 77
5,977 83

17,789 60½

EDUCATION OFFICE.

Salaries as per Statement No. 12, page 63.....
do 13, do 84.....

12,013 00
3,634 79

15,647 79

Total.....

351,306 40

W. R. HARRIS,
Accountant.

A. MACKENZIE,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 22.

STATEMENT of Amounts expended on account of the Land Improvement Fund, to 31st December, 1871.

	\$	cts.		\$	cts.
To Amounts paid to the different Municipalities as per Statement No. 23.	35,136	00	By Amounts collected from the sale of Crown and Common School Lands between 1st July, 1867, and 30th June, 1870	102,733	31
Do as per Statement No. 24.....	50,122	43			
Balance.....	8,474	88			
	102,733	31	By Balance brought down	102,733	31
				8,474	88

W. R. HARRIS,

Accountant.

A. MACKENZIE,

Treasurer.

TREASURY DEPARTMENT, ONTARIO,

Toronto, December 30th, 1871.

No. 23.

STATEMENT shewing the Receipts for the Sales of Crown Lands, and the amounts paid to the several Municipalities, after deducting the expenses attending such sales.

TOWNSHIPS.	Total Sales.	Less 20 per cent. Expenses.	One-fifth paid Municipalities.
	\$ cts.	\$ cts.	\$ cts.
Kinless	15,364 19	3,072 83	2,458 27
Kincardine	236 85	47 37	37 89
Carriack	25,458 16	5,091 63	4,073 31
Culross	23,272 69	5,054 53	4,043 63
Greenock	22,286 05	4,457 21	3,565 76
Brant	150 00	30 00	24 00
Gloucester	88 34	17 66	14 13
Goulbourn	91 10	18 22	14 57
Cavan	252 05	50 41	40 32
Manvers	92 36	18 47	14 77
Gosfield	22 50	4 50	3 60
Dunwich	531 80	118 36	94 68
Maidstone	25 00	5 00	4 00
Colchester	55 60	11 12	8 89
Rochester	24 43	4 88	3 91
Barrie	331 63	66 32	53 06
Hinchinbrooke	91 34	18 25	14 61
Olden	229 72	45 94	36 75
Oso	234 38	46 87	37 50
Storrington	110 89	22 18	17 74
Loughboro'	315 32	63 06	50 45
Kennebec	233 12	46 62	37 30
Dedford	218 00	43 60	34 88
Osprey	12,584 44	2,516 88	2,013 51
Artemesia	3,979 70	615 94	492 75
Egremont	356 29	71 25	57 01
Lutterworth	68 56	13 71	10 97
Anson	36 09	7 20	5 76
Verulam	341 43	68 28	54 63
Eldon	551 00	110 20	88 16
Somerville	840 51	168 10	134 48
Ops	143 06	28 61	22 89
Carafraza	575 82	115 16	92 13
Luther	5,993 74	1,198 75	958 99
Minto	14,159 07	2,831 81	2,265 45
Arthur	3,266 95	653 39	522 71
Amaranth	1,008 72	201 74	161 39
Gwillimbury North	319 98	63 99	51 19
Gwillimbury East	338 40	67 68	54 14
Whitechurch	65 80	13 16	10 52
Mannora	604 43	120 89	95 71
Lake	561 05	112 21	89 75
Tudor	835 61	167 12	133 69
Elzevir	958 66	191 73	153 38
Hungerford	86 51	17 30	13 85
Rawdon	142 99	28 59	22 83
Howick	18,770 73	3,754 14	3,003 31
Wawanosh	835 95	177 19	141 75
Grey	133 25	26 65	21 32
Ashfield	937 33	187 46	149 97
Zone	782 50	156 50	125 29
Tilberry East	59 70	10 14	8 11
Chatham	14 60	2 92	2 34
Sydenham	2,295 48	459 09	367 23
Sullivan	607 40	121 48	97 18
Derby	149 95	29 99	23 99
Euphrasia	2,495 91	499 18	399 34
Holland	5,071 02	1,014 20	811 35
Glenelg	413 09	82 60	65 08
Carried forward	171,302 14	34,260 28	27,468 19

STATEMENT shewing the Receipts for the Sales of Crown Lands, &c.—*Continued.*

TOWNSHIPS.	Total Sales.	Less 20 per cent. Expenses.	One-fifth paid Municipalities.
	\$ cts.	\$ cts.	\$ cts.
<i>Brought forward</i>	171,302 14	34,260 28	27,408 19
Melancthon	1,943 13	388 62	310 90
Collingwood	326 00	65 20	52 16
Proton	69 70	13 94	11 15
Burleigh	296 80	59 36	47 48
Belmont	75 00	15 00	12 00
Galway	191 11	38 22	30 57
Dummer	196 65	39 33	31 46
Otonabee	51 35	10 27	8 21
Caledonia	75 00	15 00	12 00
Clarence	86 00	17 20	13 76
Russell	120 50	24 10	19 28
Cumberland	153 74	30 74	24 60
Cambridge	80 50	16 10	12 88
McNab	232 49	46 49	37 20
Stafford	557 04	111 40	89 12
Admaston	529 04	105 80	84 64
Wilberforce	821 48	164 29	131 43
Griffith	56 20	11 24	8 99
Bromley	1,438 58	287 71	230 17
Bagot	81 78	16 35	13 08
Alice	1,135 40	227 08	181 66
Grattan	366 22	73 24	58 59
Algona North	163 41	32 68	26 14
Brudenell	315 39	63 07	50 46
Westmeath	159 23	31 84	25 47
Horton	149 23	29 84	23 87
South Algona	242 14	48 42	38 74
Brougham	91 01	18 20	14 56
Mulmer	354 35	70 87	56 69
Vespra	26 80	5 36	4 28
Nottawasaga	1,110 05	222 01	177 60
Sunnidale	1,316 09	263 21	210 57
Mono	27 60	5 52	4 41
Tiny	580 15	116 03	92 82
Adjala	27 90	5 58	4 46
St. Vincent	621 95	124 39	99 51
Madoc	225 20	45 04	36 03
Raleigh	254 50	50 90	40 72
Harwich	442 56	88 51	70 81
Dover East	63 60	12 72	10 17
Bastard	50 00	10 00	8 00
Bathurst	31 00	6 20	4 96
Pakenham	348 85	69 77	55 81
South Sherbrooke	134 64	26 92	21 54
Lanark	34 35	6 87	5 49
Dalhousie	125 45	25 09	20 07
Darling	184 47	36 89	29 51
Ramsay	124 00	24 80	19 84
Kalador	810 04	162 00	129 60
Richmond	48 00	9 60	7 68
Warwick	290 64	58 12	46 50
Enniskillen	50 00	10 00	8 00
Brooke	460 55	92 11	73 68
Sombra	56 80	11 36	9 08
Plympton	274 85	54 97	43 97
Caradoc	1,072 54	214 50	171 60
Metcalf	711 39	142 27	113 82
Exfrid	33 00	6 60	5 28
Mosa	172 00	34 40	27 52
Haldimand	246 10	49 22	39 37
Brock	185 00	37 00	29 60
Thorah	260 95	52 19	41 75
Mara	157 30	31 46	25 16
<i>Carried forward</i>	192,218 93	38,443 49	30,754 66

STATEMENT shewing the Receipts for the Sales of Crown Lands, &c.—*Concluded.*

TOWNSHIPS.	Total Sales.	Less 20 per cent. Expenses.	One-fifth paid Municipalities.
	\$ cts.	\$ cts.	\$ cts.
<i>Brought forward</i>	192,218 93	38,443 49	30,754 66
Scott	298 90	59 78	47 82
Minden	1,457 49	291 49	233 20
Snowdon	30 89	6 17	4 94
Douro	101 46	20 29	16 23
Oro	41 60	8 32	6 65
Gwillimbury West	205 25	41 05	32 84
North Orillia	41 66	8 21	6 57
Essa	314 25	62 85	50 28
Medonte	112 65	22 53	18 02
Digby	828 00	165 73	132 59
Emily	826 32	165 26	132 21
Laxton	2,188 25	437 65	350 12
Carden	1,857 03	371 40	297 12
Fenelon	156 49	31 29	25 04
Wallace	13,203 55	2,640 71	2,112 56
Elton	5,719 67	1,143 94	915 15
Totals	219,602 48	43,920 16	35,136 00

No. 24.

STATEMENT shewing the receipts for the Sale of Common School Lands, and the Amount paid the several Municipalities after deducting the expenses attending such Sales.

TOWNSHIPS.	Total Sales.	Less 6 per cent Expenses.	One-fourth paid Municipalities.
	\$ cts.	\$ cts.	\$ cts.
Bruce	15,527 89	931 67	3,649 05
Huron	19,566 21	1,173 97	4,598 06
Saugeen	5,454 25	327 25	1,281 75
Kinloss	3,343 12	200 58	785 63
Kincardine.....	11,198 12	671 88	2,631 56
Brant	21,639 45	1,298 36	5,085 27
Elderslie.....	13,091 67	785 50	3,076 54
Arran	12,797 71	767 86	3,007 46
Egremont	13,769 64	826 17	3,235 86
Minto	115 31	6 91	27 10
Arthur.....	3,517 48	211 04	826 61
Howick	393 55	23 61	92 48
Farnbury.....	10,378 18	622 69	2,438 87
Wawanosh	3,812 37	228 74	895 90
Grey.....	16,237 64	974 25	3,815 85
Ashfield.....	1,994 00	119 64	468 59
Morris.....	9,876 90	592 61	2,321 07
Sydenham.....	2,308 31	138 49	542 45
Bentinck.....	12,404 30	744 25	2,915 01
Normanby.....	17,484 93	1,049 09	4,103 97
Sullivan.....	8,289 70	497 38	1,948 68
Derby.....	1,936 52	116 19	455 08
Holland.....	2,691 98	161 51	632 61
Glenelg.....	11,699 56	701 97	2,749 39
Wallace.....	19,229 75	1,153 78	4,518 99
Elma	12,826 39	769 59	3,014 20
Total.....	252,584 98	16,100 98	59,122 43

No. 25.

STATEMENT shewing the amount of Stationery supplied the various Departments by the Queen's Printer, during the year ended December 31st, 1871.

	Stationery supplied.....	\$	cts.	\$	cts.
Lieutenant-Governor's Office	do	33	92		
Attorney-General's do	do	85	81		
Executive Council do	do	27	92		
Secretary and Registrar's do	do	196	67		
Registrar General's do	do	14	20		
Treasurer's do	do	174	81		
Agriculture and Public Works Office	do	214	25		
Crown Lands do	do	1,169	00		
Inspector of Prisons do	do	23	92		
Auditors' do	do	9	93		
Queen's Printer do	do	11	78		
Law Stamp and License do	do	29	00		
Legislative Assembly	do	1,533	35		
Court of Chancery do	do	227	52		
Do Queen's Bench do	do	55	72		
Do Common Pleas do	do	45	08		
Lunatic Asylum, Toronto do	do	29	90		
Registry Office, Thunder Bay do	do	130	00		
Do Bracebridge do	do	208	00		
Do Parry Sound	do	128	00		
				4,348	78
	Stock on hand December 31st, 1870	3,662	52		
	do purchased to do 1871	4,431	45		
		8,093	97		
	LESS—Amount issued to Departments	4,348	78		
	Stock on hand December 31st, 1871	3,745	19		

W. R. HARRIS,
Accountant.

A. MACKENZIE,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 26.

THE LAW SOCIETY, in account with the Province of Ontario.

1871	DR.	\$ cts.	\$ cts.
Jan. 1.....	To Debentures brought down 16,000 00 " balance of open account..... 122,391 21	138,391 25	
June 30	" half year's interest on debentures 480 00 do open account 3,059 78		
Dec. 31	" payments made by Ontario 1,642 78 " half year's interest on debentures 480 00 do open account 3,059 78		
	CR.	147,113 59	
	By Law Stamp fees	14,500 00	132,613 59
	DR.		
1872 Jan. 1.....	To debentures brought down 16,000 00 " balance of open account..... 116,613 59		132,613 59

W. R. HARRIS,
Accountant.

A. MACKENZIE,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 27.

STATEMENT of amounts charged against Unforeseen and Unprovided during the year ending 31st December, 1871.

—	SERVICE.	Expenditure in excess of Appropriation.		
			\$	cts.
	Amount of Appropriation		\$	cts.
				20,000 00
	CIVIL GOVERNMENT.			
	Government House	516 17		
	Lieutenant-Governor's office—Contingencies.....	5 80		
	Attorney-Generals office do	151 74		
	Secretary and Registrars office do	31 31		
	Public Works Department do	199 82		
	Inspector of Prisons' office do	65 55		
	do Clerk	84 00		
	Queen's Printer's office—Contingencies	22 17		
			1,076 56	
	LEGISLATION.			
	Sessional Writers, &c.	2,212 85		
	Contingencies and Repairs	1,656 85		
			3,869 70	
	ADMINISTRATION OF JUSTICE.			
	Court of Chancery—Salaries	1,273 66		
	do Contingencies	261 56		
	Court of Queen's Bench do	283 21		
			1,818 43	
	PUBLIC WORKS AND BUILDINGS.			
	London Lunatic Asylum	1,581 79		
	Deaf and Dumb Institute, Belleville	551 88		
	Youngs' Point Lock	2 07		
	Normal and Model Schools	1,013 50		
	Washago and Gravenhurst road.....	177 91		
			3,327 15	
	ASYLUM MAINTENANCE.			
	Deaf and Dumb Asylum, Belleville.....		1,068 06	
	EDUCATION.			
	Preparing Examination Papers — Public School Teachers		600 00	
	CHARGES ON REVENUE.			
	Refunds.....		8,098 82	
	MISCELLANEOUS.....		3,131 75	
				22,990 47
	Balance to be provided for in Estimates of 1872			2,990 47

W. R. HARRIS,

Accountant.

A. MACKENZIE,

Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 28.

STATEMENT shewing the Estimates for the year 1871, the amount expended by the Government of Ontario, and the amounts unexpended and overexpended to 31st December, 1871.

SERVICE.	SUB-HEAD OF SERVICE.	Appropriation			Expenditure.			Unexpended.			Overexpended.		
		\$	cts.		\$	cts.		\$	cts.		\$	cts.	
Civil Government	Government House	3,987 00			4,503 17						516 17		
	Lieutenant-Governor's office, salaries	2,245 36			1,495 53			750 03					
	Do do contingencies	300 00			305 80						5 80		
	Executive Council office, salaries	1,015 00			1,015 00								
	Do do contingencies	700 00			650 58			49 42					
	Attorney-General's office, salaries	6,624 65			6,624 65								
	Do do contingencies	1,800 00			1,951 74						151 74		
	Treasury Department, salaries	8,765 00			8,765 00								
	Do contingencies and repairs	2,796 65			2,253 24			543 42					
	Secretary and Registrar's office, salaries	9,495 00			9,495 00								
	Do do contingencies and repairs	1,996 67			2,027 98								
	Registrar-General's Branch, expenditure	8,200 00			7,653 12						31 31		
Miscellaneous	Public Works Department, salaries	10,365 00			10,365 00								
	Do contingencies and repairs	3,296 67			3,496 49								
	Crown Lands Department, salaries	30,480 00			29,884 80			595 20					
	Do contingencies	9,525 00			8,454 00			1,071 00					
	Gratuities, Public Officers	7,000 00			3,200 00			3,800 00					
	Inspector of Prisons	2,000 00			2,000 00								
	Do Contingencies	650 00			715 55								
	Do Clerk	400 00			484 00								
	Auditor's office, salaries	2,730 00			2,730 00								
	Do contingencies	50 00			11 18			38 82					
	Inspector of Registry Offices	2,000 00			2,000 00								
	Queen's Printer, salary	1,200 00			1,200 00								
	Do contingencies	50 00			72 17						22 17		
Legislation	Official Gazette	4,500 00			3,259 99			1,240 01					
	Salaries	10,025 00			8,725 00			1,300 00					
	Sessional Writers, Messengers and Pages	2,000 00			4,212 85						2,212 85		
	Stationery	15,000 00			11,412 27			3,587 73					
	Printing, &c., Statutes	2,500 00			1,847 03			652 97					
	Expenses of Elections	30,000 00			17,286 66			12,713 34					
	Contested Elections	5,000 00			2,219 15			2,780 85					
	Increase of Library	1,000 00						268 55					
	Indemnity to Members	72,319 68			37,809 08			34,510 60					

Contingencies and Repairs	5,850 00	7,506 85	.....	1,656 85
Postages	2,500 00	2,426 94	73 06	
Court of Chancery—Salaries	15,751 66	17,025 32		
do Contingencies	1,015 00	1,276 56		1,273 66
Court of Queen's Bench—Salaries	6,200 00	6,260 00		261 56
do Contingencies	350 00	633 21		
Court of Common Pleas—Salaries	4,200 00	4,200 00		283 21
do Contingencies	210 00	155 86	54 14	
Court of Error and Appeal	10,050 00	10,050 00		
Criminal Justice	120,000 00	113,474 59	6,525 41	
Miscellaneous Justice	35,100 00	29,546 17	5,553 83	
London Lunatic Asylum	70,144 29	71,726 08		1,581 79
Toronto	32,977 17	30,431 60	2,545 57	
Deaf and Dumb Institution	11,722 45	12,274 33		551 88
Asylum for the Blind	70,406 06	53,784 81	16,681 25	
Reformatory	6,409 05	4,489 79	1,919 26	
Court House and Gaol, Sault Ste. Marie	875 58	845 10	30 48	
Lock, Rosseau River	16,253 87	15,771 94	481 93	
do Balsam Lake	15,833 13	11,382 25	4,450 88	
do Young's Point	439 00	441 67		2 07
Agricultural College and Farm	100,600 00	47,350 00	52,650 00	
School of Industrial Science	50,000 00	38,509 34	11,490 66	
Central Prison	150,000 00	10,925 96	139,074 04	
Asylum for Adult Idiots	10,000 00	6,534 04	3,445 96	
Normal and Model Schools	12,600 00	13,613 50		1,013 50
Departmental Buildings	2,500 00	1,862 38	637 62	
Pigeon River Works	5,000 00	1,527 40	3,472 60	
Sydenham	2,000 00	374 76	1,625 24	
Nottawasaga	6,000 00	1,708 82	4,291 18	
Kaministiquia	6,000 00	197 10	5,802 90	
Portage du Fort Bridge	4,000 00		4,000 00	
Navigation, Scougog River	11,959 39	8,719 73	3,239 66	
Cut, Lakes Joseph and Rosseau	3,205 70	2,967 50	238 20	
Washago and Gravenhurst Road	8,296 57	8,474 48		177 91
Surveys and Drainage	153,628 21	78,290 61	75,427 60	
Miscellaneous	25,300 00	4,777 21	20,522 79	
Registry Offices, Thunder Bay and Parry Sound	4,000 00	3,710 05	289 95	
Toronto Lunatic Asylum	80,110 00	73,261 52	6,848 48	
London	56,000 00	55,712 27	287 73	
Orillia	21 32	21 32		
Rockwood	47,136 00		47,136 00	1,068 06
Deaf and Dumb Asylum	19,650 00	20,718 06		
Reformatory	21,710 00	21,710 00		
Agriculture and Arts	75,100 00	74,927 90	172 10	
Carried forward	1,540,635 94	1,018,385 20	483,471 34	11,159 90

Statement, &c.—Concluded.

SERVICE.	SUB-HEAD OF SERVICE.	Appropriation. \$ cts.	Expended. \$ cts.	Unexpended. \$ cts.	Overexpended. \$ cts.
	<i>Brought forward</i>	1,540,695 94	1,018,385 20	483,471 34	11,159 90
Immigration		30,000 00	29,712 56	287 41	
Hospitals and Charities		40,260 00	40,260 00		
Literary and Scientific Institutions		1,350 00	1,350 00		
Education		175,000 00	172,985 16	2,014 84	
	Public and Separate Schools	6,000 00	5,990 00	10 00	
	Poor Schools	13,842 00	11,811 77	2,030 23	
	Normal School—Salaries	6,040 00	5,977 83	62 17	
	do Contingencies	70,000 00	69,986 00	14 00	
	High Schools	35,000 00	34,949 02	50 98	
	Libraries, Apparatus and Prizes	3,405 00	3,403 75	1 25	
	Depository—Salaries	1,710 00	1,571 25	138 75	
	do Contingencies	6,500 00	6,143 88	356 12	
	Superannuated Teachers	3,850 00	3,841 88	8 12	
	Museum	2,300 00	2,370 59	19 41	
	<i>Journal of Education</i>	4,000 00	2,999 98	1,000 02	
	High School Inspection	22,500 00	11,527 50	10,972 50	
	Public School Inspection	12,013 00	12,013 00		
	Education Office—Salaries	4,555 00	3,634 79	920 21	
	do Contingencies	5,000 00		5,000 00	
	Agricultural Instruction	7,500 00	1,500 00	6,000 00	600 00
	Collegiate Institutes		600 00		
	Preparing Examination Papers—Public School Teachers	71,365 40	68,884 00	2,481 40	
Municipalities' Fund		102,733 31	94,258 43	8,474 88	
Land Improvement Fund		187,652 96		187,652 96	
Common School Fund					8,098 82
Charges on Revenue					
	Miscellaneous	3,700 00	584 21	3,115 79	
	Board of Surveyors	400 00	112 20	287 80	
	Salaries of Agents, &c.	35,000 00	24,972 59	10,027 41	
	Refunds	15,000 00	23,098 82		
	Surveys	50,000 00	17,902 05	32,097 95	
	Claims—Lands twice sold	5,000 00		5,000 00	
	Inspectors valuing Lands	10,000 00	2,920 10	7,079 90	

Colonization Roads.....	15,000 00	400 00	14,600 00	
Miscellaneous	60,000 00	55,409 04	4,590 96	
Stationery Account	34,097 46	37,229 21	.....	3,131 75
Total	2,581,560 07	1,816,866 78	787,766 43	22,990 47

W. R. HARRIS,
Accountant.

A. MACKENZIE,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 30th, 1871.

No. 29.

COMPARATIVE STATEMENT, shewing the amounts expended by the Government of Ontario during the four years ending 31st December, 1871.

SERVICE.	SUB-HEAD OF SERVICE.	Expenditure, 1868.		Expenditure, 1869.		Expenditure, 1870.		Expenditure, 1871.	
		\$	cts.	\$	cts.	\$	cts.	\$	cts.
Civil Government	Lieutenant-Governor's Office, Salaries	1,106	65	1,200	00	1,200	00	1,405	53
	Government House, Maintenance	2,836	00	2,459	46	3,234	33	4,503	17
	Executive Council Office, Salaries	954	76	1,015	00	1,015	00	1,015	00
	Attorney-General's Office, do	8,286	46	6,150	00	6,150	00	6,624	65
	Treasury Department, do	7,302	29	7,105	00	8,063	43	8,765	00
	Secretary-Registrar's Office, do	8,087	00	8,081	00	8,784	15	9,405	00
	Registrar-General, do	9,860	66	7,765	00	5,712	47	7,653	12
	Department of Agriculture and Public Works, Salaries	38,119	52	34,872	31	30,273	32	10,365	00
	Crown Lands Department, Salaries	23,778	34	*21,883	34	15,541	39	29,884	80
	Departmental	5,000	00	2,530	85	3,070	14	3,199	55
	Distressed Fishermen, Nova Scotia	1,180	62	3,136	42	4,345	85	3,259	99
	Inspector of Asylums and Prisons, Salary and Contingencies	1,435	43	4,000	00	2,481	67	3,200	00
	Official Gazette	11,000	00	13,180	00	2,803	18	2,741	18
Legislation	Towards facilitating transport on Lake Superior			2,000	00	2,000	00	2,000	00
	Loan to Toronto General Hospital					269	42	1,272	17
	Gratuities			375	00	16,120	27	2,669	98
	Provincial Auditor, Salary and Contingencies								
	Inspector of Registry Offices, Salary								
	Queen's Printer, Salary and Contingencies								
	Arbitration	200	00						
	Salaries	9,906	01	11,010	53	9,350	09	8,725	00
	Contingencies and Repairs	3,265	05	3,279	53	6,228	18	7,506	85
	Indemnity to Members	61,800	00	44,519	90	5,480	32	37,809	08
	Sessional Writers, Messengers and Pages	4,451	25	1,856	25	960	05	4,212	85
	Postages, &c.	3,881	56	2,577	92	1,303	82	2,426	94
	Stationery, Printing and Binding	9,843	51	15,248	02	11,055	99	11,412	27
Administration of Justice	Printing and Binding Statutes	1,513	99	1,649	13	1,461	25	1,847	03
	Expenses of Elections	499	89	601	90	341	05	19,505	81
	Library	787	92	1,142	21	1,107	21	731	45
	Court of Chancery, Salaries	14,441	46	14,755	00	13,135	00	17,025	32
	Court of Queen's Bench, Salaries	6,905	92	6,493	33	6,260	00	6,260	00
	Court of Common Pleas, Salaries	4,240	25	4,200	00	4,200	00	4,200	00

Contingencies.....	1,200 81	1,303 50	2,256 01	2,065 63
Criminal Justice.....	118,104 61	108,223 43	111,899 07	113,474 59
Miscellaneous Justice.....	27,102 76	37,471 29	42,253 94	39,596 17
Public Works and Buildings.....	123,010 29	257,593 43	407,734 29	430,620 45
Immigration.....		17,595 00	32,087 65	29,712 56
Agriculture and Arts.....	66,034 00	67,551 41	66,722 20	74,927 90
Hospitals and Charities.....	39,000 00	40,000 00	42,510 00	40,260 00
Literary & Scientific Institutions.....	3,600 00	3,600 00	1,350 00	1,350 00
Education.....	327,487 51	266,373 53	315,887 92	351,306 40
Asylum Maintenance.....	76,543 96	73,813 86	70,818 75	73,201 52
Toronto Lunatic Asylum.....	35,313 12	32,450 98	24,852 68	
Malden.....	17,336 87	16,880 62	15,416 55	21 32
Orillia.....			19,145 43	55,712 27
London.....			5,219 03	20,718 06
Belleville Deaf and Dumb Institute.....				
Reformatory.....	22,992 24	23,557 50	22,473 36	21,710 00
Charges on Revenue.....	40,653 49	61,085 97	80,481 17	69,405 76
Crown Lands Expenditure.....			5,442 81	584 21
Miscellaneous.....				
Colonization Roads.....	31,959 42	35,589 94	50,000 00	55,409 04
Municipalities Fund.....		168,596 73	80,313 30	68,884 00
Land Improvement Fund.....				94,258 43
Miscellaneous.....				34,559 23
Stationary Office.....		3,735 03	1,686 56	82 67
Unforeseen and Unprovided.....	12,229 15	6,039 51	+	+
Total.....	1,183,852 77	1,444,608 83	1,580,663 21	1,816,866 78

* In the Estimates of 1869, the contingencies of the Education Department were erroneously charged to Civil Government.

+ The expenditure under Unforeseen and Unprovided for 1870 and 1871 are included in the several services for which the expenditure was made. See Statement No. 26.



EXPENDITURE

ON ACCOUNT OF

VOTE OF CREDIT,

1872.

EXPENDITURE ON ACCOUNT OF VOTE OF CREDIT, 1872.

SERVICE.	SUB-SERVICE.	\$	cts.	\$	cts.
CIVIL GOVERNMENT.	EXECUTIVE COUNCIL :— Lieut. Governor's Office, Salaries Attorney General's Office, do Treasury Department, do Secretary's Department, do Public Works Department, do Crown Lands Department, do Contingencies, Inspector of Prisons Salaries Auditor, Queen's Printer, Salary and cost of Official Gazette.....	99 99 564 32 730 99 853 80 1,387 04 2,514 93 3,761 78 207 16 227 46 408 46			12,755 93
LEGISLATION	Salaries Indemnity to Members, &c.....	1,105 00 10,000 00			11,105 00
ADMINISTRATION OF JUSTICE	Court of Chancery, Salaries..... Court of Queen's Bench, do Court of Common Pleas, do Criminal Justice	1,266 80 521 64 349 99 8,591 23			10,729 66
PUBLIC WORKS AND BUILDINGS	Blind Institute, Brantford College of Technology Central Prison Balsam Lock Surveys and Drainage..... Miscellaneous	81 00 1,011 00 4,348 75 81 00 1,430 50 1,773 56			8,725 81
ASYLUM MAINTENANCE	Toronto Lunatic Asylum London Lunatic Asylum.....	6,307 39 515 25			6,822 64

REFORMATORY.....	Maintenance.....	1,546 97
IMMIGRATION.....		25 00
EDUCATION.....		
	Grammar Schools.....	24,434 00
	Public and Separate Schools.....	3,909 00
	Superannuated Teachers.....	35 67
	Normal and Model Schools.....	1,134 93
	Depository.....	6,803 74
	Museum.....	212 17
	Salaries.....	2,761 63
	Contingencies.....	738 39
CROWN LANDS EXPENDITURE.....		40,029 53
	Agents' Salaries, &c.....	1,844 02
	Refunds.....	1,303 27
	Surveys.....	300 00
SUPPLEMENTARY ESTIMATE.....		
	Expenditure on account of Services not included in Vote of Credit.....	3,487 29
		8,398 97
	Total.....	\$103,626 80

ALEX. MCKENZIE,
Treasurer.

TREASURY DEPARTMENT.
TORONTO, February 9th, 1872.

ANNUAL REPORT

OF THE

NORMAL, MODEL, GRAMMAR

AND

COMMON SCHOOLS

OF

ONTARIO,

FOR THE YEAR 1870.

WITH APPENDICES,

BY THE CHIEF SUPERINTENDENT OF EDUCATION.

Printed by Order of the Legislative Assembly.



TORONTO:

PRINTED BY HUNTER, ROSE & CO., 86 AND 88 KING ST. WEST.
1871.



Department of Public Instruction for Ontario.

EDUCATION OFFICE,

TORONTO, 31st October, 1871.

SIR,—I have the honour to transmit herewith, to be laid before His Excellency the Lieutenant Governor, my Report of the Normal, Model, Grammar and Common Schools of Ontario, during the year 1870, including a Statistical Statement of other Educational Institutions, as far as I have been able to obtain information respecting them. To my Report I have added an Appendix, which contains extracts from local reports, and other documents and papers illustrative of the means which have been employed to promote the improvement and extension of the Grammar and Common (now High and Public) Schools throughout Ontario.

I have the honour to be, Sir,

Your obedient servant,

(Signed,) E. RYERSON.

To the Honourable STEPHEN RICHARDS, M.P.P.,

Secretary of the Province,

Toronto,

CONTENTS:

PART I.—GENERAL REPORT.

	PAGE.
INTRODUCTORY	
I. TABLE A.—Receipts and Expenditures of Common School Moneys.....	3
II. TABLE B.—School population: Pupils attending the Common Schools and in different branches of instruction.....	4
III. TABLE C.—Common School Teachers; their Religious Persuasions; Rank, Salaries....	4
IV. TABLE D.—Schools; School Houses; School Visits; School Lectures; Time of keeping the Schools open.....	5
V. TABLE E.—Text books, Maps and Apparatus used in the Schools. The Bible and Prayers.....	8
VI. TABLE F.—Roman Catholic Separate Schools.....	9
VII. TABLE G.—Grammar Schools; Receipts; Expenditure; Pupils.....	10
VIII. TABLE H.—Number of Pupils in the various branches; Miscellaneous.....	10
IX. TABLE I.—Meteorological Stations; Observations at the Grammar School Stations.....	11
X. TABLE K.—Normal and Model Schools.....	16
XI. TABLE L.—Other Educational Institutions.....	17
XII. TABLE M.—The Public Libraries Supplied by the Department and all other Libraries....	17
XIII. TABLE N.—Maps, Globes and various other School apparatus supplied by the Department	18
XIV. TABLE O.—Superannuated Teachers.....	20
XV. TABLE P.—Educational Summary for the year 1870.....	21
XVI. TABLE Q.—General Statistical Abstract of the progress of Education in Ontario from 1842 to 1870.....	21
XVII. The Educational Museum	21
XVIII. Report of the Inspector of Grammar Schools.....	22
XIX. Extracts from Reports of Local Superintendents of Common Schools.....	22
XX. Exposition of, and General Remarks on, the School Law Improvement Act, of 1871 :	
Preliminary observations.....	20
Objections to Improve our School System answered.....	20
Illustrations of Educational progress in other countries.....	21
The Educational System of Prussia	21
The New School Law of Austria.....	22
The French System of Education.....	23
The Swiss System of Education.....	24
Schools and School Law of England.....	25
The New School Law of England.....	26
The Scotch System of Education.....	28
The Irish System of Education.....	29
Comparison of the different European Systems.....	29
American Systems of Education.....	30
Necessity for the recent changes in the School Law of Ontario.....	30
The various features of the New School Law.....	31
The recent important changes in the School Law of Ontario.....	31
I. The System of Free Schools.....	32
(1). Free Schools in various countries.....	32
II. Compulsory Attendance at School.....	34
(1). Origin of the Compulsory System in Germany and Scotland—Example.....	34

	PAGE.
(2). English advocates of Compulsory Education.—Its necessity.—Examples..	36
(3). Compulsory Education involves an improvement in its quality and amount.....	38
(4). American advocates of Compulsory Education.—Illustration.....	39
III. Higher standard of Qualification for Teachers.....	40
(1). Professional Boards of Examiners for Teachers in various States.....	40
(2). New System of examination of Teachers in Ontario.....	41
(3). Objections to this System answered.....	42
IV. A Fixed Legal status for the profession of Teaching	44
(1). Fixing the minimum Salaries of Teachers.....	45
(2). Experience in Teaching required from Inspectors and Examiners.....	46
(3). Duty of Teachers to provide for the support of those worn-out in the Profession.....	47
(4). Objections by a certain class of Teachers to contribute to the Fund.....	48
(5). The Old Teachers keep down the general scale of Remuneration.....	49
(6). On what principle should the Superannuated Fund be supported.....	50
(7). Should the Teachers sustain this Fund?.....	50
(8). Official Regulations in regard to the Superannuation Fund.....	51
V. Comprehensive Course of Study for the Public Schools.....	52
(1). Education directed towards the pursuits and occupations of a People.....	52
(2). The new subjects of Agriculture, Commercial Instruction, Mechanics' Drawing, Practical Science and Natural History	53
(3). The way in which this Instruction should be given.....	54
(4). Necessity for teaching Practical Science in the Schools.—Examples.....	55
(5). The Study of Natural History in the Schools.....	55
(6). The Value of Drawing in the Schools.....	56
(7). Provision for Teaching Vocal Music in our Schools.....	57
(8). Facilities for giving a Practical Commercial Education in the Schools.....	58
VI. Providing adequate School Accommodation.....	59
(1). Proceedings in Other Countries in regard to School Accommodation..	60
VII. Superseding School Section Divisions, and establishing Township Boards of Education..	62
(1). Township Boards in various American States.....	62
VIII. Authorizing the Establishment of Industrial Schools.....	64
IX. Separate Course of Study for High Schools.....	64
X. Collegiate Institutes, or Local Colleges.....	65
(1). The Study of Latin in Collegiate Institutes.....	66
(2). Opinions in favour of English <i>versus</i> Latin.....	66
(3). Conclusions and Recommendations of the English Commissioners.....	67
XI. Support equally of the High and Public Schools by Municipal Councils.....	67
XII. The New Principle of "Payment by Results".....	68
XIII. More thorough and systematic Inspection of Schools	69
(1). Examples and Warnings of other Countries.....	69
(2). Spirit in which Inspection should be performed.....	71
(3). The great value of Inspection to Public Schools	72
XIV. Miscellaneous Provisions of the New School Act.....	73
Conclusion	74

PART II.—STATISTICAL REPORT.

THE COMMON SCHOOLS.

	PAGE.
TABLE A.—Moneys ; Amount received and expended in support of Common Schools.	76
TABLE B.—Pupils ; Children attending the Common Schools, and in the different branches of Common School Education.....	84
TABLE C.—The Number, Religious Denominations, Certificates and Salaries of Common School Teachers.....	96
TABLE D.—Schools ; Number of Common Schools, School Houses, Visits, Lectures and time the Common Schools have been kept open.....	98
TABLE E.—Text Books, Maps and Apparatus used in the Schools. The Bible and Prayers...	100
TABLE F.—The Roman Catholic Separate Schools.....	102

THE GRAMMAR SCHOOLS.

TABLE G.—Moneys received and expended in support of Grammar Schools ; Pupils.....	104
TABLE H.—Number of Pupils in the various branches of instruction, and miscellaneous information.....	108
TABLE I.—Meteorological Observations at the Senior County Grammar Schools.....	116

THE NORMAL SCHOOL.

TABLE K.—Students, their Certificates, Residences and Religious Denominations.....	120
--	-----

THE OTHER EDUCATIONAL INSTITUTIONS.

TABLE L.—Colleges, Academies and Private Schools.....	123
---	-----

THE FREE PUBLIC LIBRARIES.

TABLE M.—Moneys ; Number of Volumes and miscellaneous information ; other Libraries...	124
--	-----

THE GRAMMAR AND COMMON SCHOOLS.

TABLE N.—Maps and Apparatus supplied by the Education Department.....	129
---	-----

THE SUPERANNUATED COMMON SCHOOL TEACHERS.

TABLE O.—Names and periods of Service of Teachers and their Pensions.....	131
---	-----

THE EDUCATIONAL SUMMARY FOR 1870.

TABLE P.—Number of Institutions and Pupils, and Moneys expended for Educational purposes.....	135
---	-----

MISCELLANEOUS.

TABLE Q.—Statistical Abstract of the Educational progress of Ontario.....	138
---	-----

PART III.—APPENDICES.

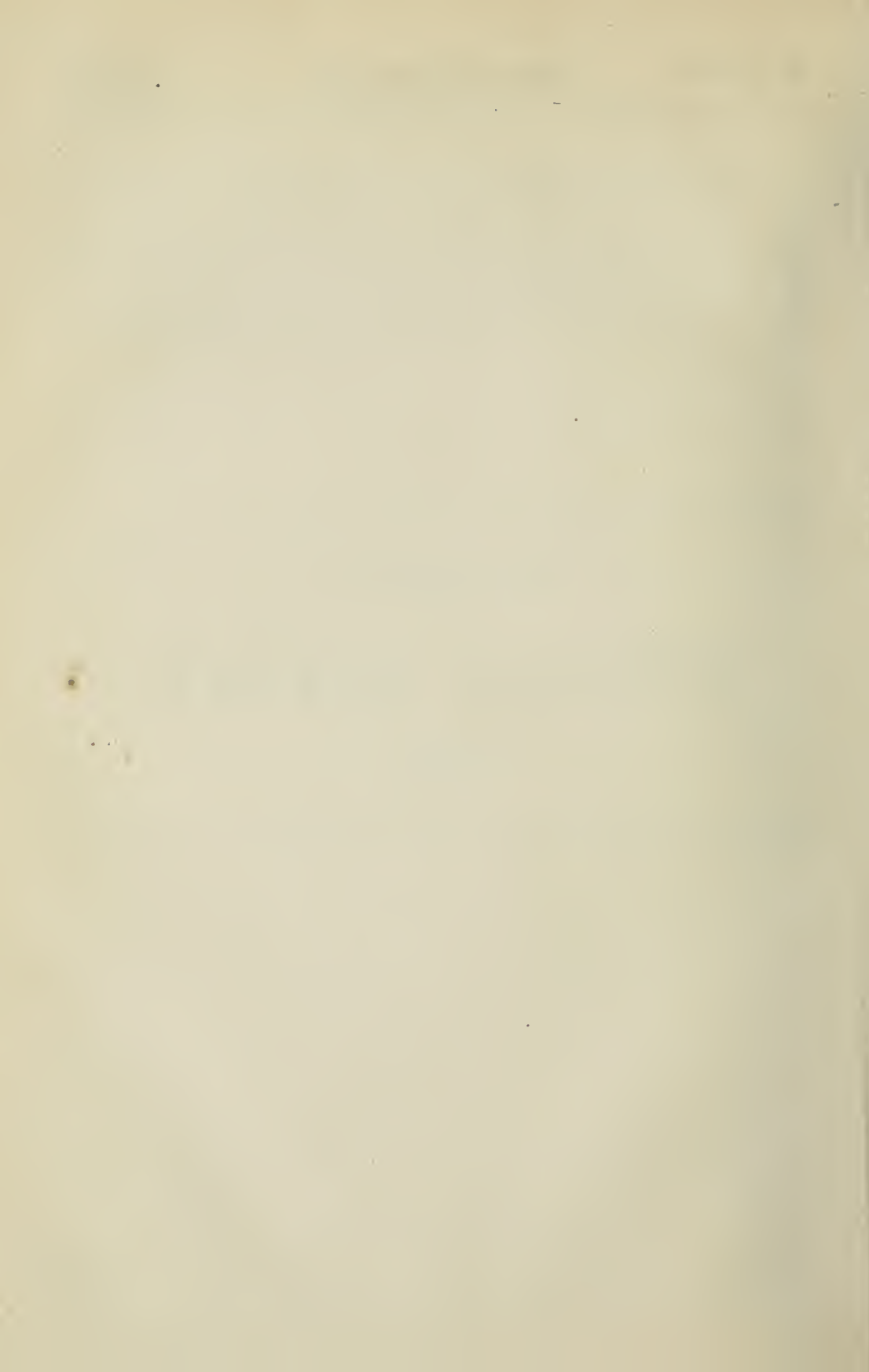
A.—Report of the Inspector of Grammar Schools.....	3
B.—Extracts from Reports of Local Superintendents of Common Schools.....	8

	PAGE.
C.—Circular from the Chief Superintendent to the Inspectors of Public Schools in the Province of Ontario	15
D.—Text Books for use in the Public Schools of Ontario	27
E.—Text Books for use in the High Schools of Ontario.....	29
F.—Summary of Apportionment to Counties, Cities, Towns and Villages, 1871	32
G.—Apportionment of the Grammar School Fund for the year 1871	34
H.—Provincial Certificates granted by the Chief Superintendent of Education.....	36
I.—The Educational Museum—Character and Objects.....	40

PART I.

GENERAL REPORT.

1870.



ANNUAL REPORT
OF THE
Normal, Model, Grammar and Common Schools
IN ONTARIO,
FOR THE YEAR 1870.

PART I.—GENERAL REPORT.

*To His Excellency the Honourable WILLIAM PEARCE HOWLAND, C. B.,
Lieutenant-Governor of the Province of Ontario :—*

MAY IT PLEASE YOUR EXCELLENCY,

As required by law, I herewith present my Report on the condition of the Normal, Model, Grammar and Common Schools of the Province of Ontario for the year 1870.

I am happy to be able to state, that although the *increase* of the School Fund by local effort in 1869 was \$38,093 (\$28,622 of which was applied to *increase* the salaries of teachers)—yet the increase of the Fund for 1870 by the same local effort is \$116,938, of which \$47,515 (only \$29,000 in 1869) have been expended in increasing the salaries of teachers. The increase of pupils in the schools have been 10,088.—The whole number of pupils in the schools is 442,518. I will now give a summary view from the Statistical Tables.

I.—TABLE A.—RECEIPTS AND EXPENDITURE OF COMMON SCHOOL MONEYS.

Receipts.

1. The amount apportioned from the Legislative Grant was \$179,252—*increase* \$8,109. The amount apportioned for the purchase of maps, apparatus, prize and library books, was \$14,406—*increase*, \$1,327 (as against a *decrease* of \$650 in 1869).

2. The amount from *Municipal* School Assessment was \$385,284—*increase*, \$12,541.

3. The amount from *Trustees'* School Assessment was \$951,099—*increase*, \$60,265, (only \$35,300 in 1869). The amount of *Trustees'* Rate Bills for School fees was \$44,905—*decrease*, \$804, showing the steady decline of *rate bills*, and *increase* of *Free* Schools.

4. The amount from Clergy Reserve balances, and other sources, applied to School purposes, was \$369,416—*increase*, \$35,499, (as against a *decrease* of \$914 in 1869).

5. *The total receipts* for all Common School purposes for the year 1870 amounted to \$1,944,364, nearly two millions of dollars—*increase* over the total receipts of the preceding year, \$116,938, (as against \$38,000 *increase* in 1869).

Expenditures.

1. For salaries of teachers, \$1,222,681—increase, \$47,515, (\$28,600 in 1869).
2. For maps, globes, prize books and libraries, \$33,891—increase, \$4,265, (as against a decrease of \$1,500 in 1869).
3. For sites and building of school-houses, \$207,500—increase \$16,129, (\$5,000 in 1869).
4. For rents and repairs of school-houses, \$61,860—increase \$7,851, (as against a decrease of \$600 in 1869).
5. For school books, stationery, fuel, and other expenses, \$186,127—increase \$11,402
6. Total expenditure for all Common School purposes, \$1,712,060—increase, \$87,164 (only \$36,000 in 1869).
7. Balances of school moneys not paid at the end of the year when the returns were made, \$232,303—increase, \$29,774.

II.—TABLE B.—SCHOOL POPULATION, PUPILS ATTENDING COMMON SCHOOLS,
DIFFERENT BRANCHES OF INSTRUCTION.

The statute requires the returns of school population to include children between the ages 5 and 16 ; but it confers the *equal* right of attending the schools upon all residents in each School Division between the ages of 5 and 21 years.

1. School population (including only children between the ages of 5 and 16 years), 483,966—increase, 13,566.

2. Pupils between the ages of 5 and 16 years attending the schools, 420,488—increase, 11,304. Number of pupils of other ages attending the schools, 22,030—decrease, 1,216. Total number of pupils attending the schools, 442,518—increase, 10,088.

3. The number of *boys* attending the schools, 233,381—increase, 3,696. The number of *girls* attending the schools, 209,137—increase, 6392.

4. The number reported *indigent* pupils, 3,546—increase, 121.

5. The table is referred to for the reported periods of attendance of pupils, and the number in each of the several subjects taught in the schools.

6. The number reported as not attending any school, is 31,265—decrease, 3,395. The decrease under this head the preceding year was 2,392. The ratio of decrease is gratifying ; but I hope it will rapidly advance, and that this ominous and humiliating item will soon disappear altogether through the Christian and patriotic exertions of the people at large, aided by the new amendments in the School Law on the subject of compulsory education.

III.—TABLE C.—RELIGIOUS DENOMINATIONS, CERTIFICATES, ANNUAL SALARIES OF
TEACHERS.

1. *Number of Teachers, Male and Female.*—In the 4,566 schools reported, 5,165 teachers have been employed—increase, 111 ; of whom 2,753 are male teachers—decrease, 22 ; and 2,412 are female teachers—increase, 133.

2. *Religious Persuasions of Teachers.*—Under this head there is little variation. The teachers are reported to be of the following persuasions :—Church of England, 869—increase, 43 ; Church of Rome, 592—increase, 26 ; Presbyterians (of different classes), 1,589,—increase, 16 ; Methodists (of different classes), 1,509—increase, 39 ; Baptists (of different classes), 282—decrease, 25 ; Congregationalists, 76—increase, 13 ; Lutherans, 21—increase, 3 ; Quakers, 14—decrease, 3 ; Christians and Disciples, 47—decrease, 1 ; reported as Protestants, 117—increase, 12 ; Unitarians, 4—decrease, 4 ; other persuasions, 14 ; not reported, 31—decrease, 8.

N.B.—Of the 592 teachers of the Church of Rome, 356 are employed in the Public Common Schools, and 236 are teachers of Separate Schools.

3. *Teachers' Certificates.*—Total number of certificated or licensed teachers reported is 5,061—increase, 141 ; Normal School Provincial Certificates, 1st class, 319—increase, 60 ; 2nd class, 349—increase, 7 ; (no 3rd class Normal School Certificates are given) ; County Board Certificates of the old Standard, 1st class, 1,961—increase, 142 ; 2nd class, 2,102—

decrease, 15 ; 3rd class, 330—decrease, 53 ; not reported as classified, 104—decrease, 30 ; certificates annulled, 11.

4. Number of schools in which the teacher was changed during the year, 667—increase, 8.

5. Number of schools which have more than one teacher, 322—increase, 18.

6. *Annual Salaries of Teachers.*—The highest salary paid to a male teacher in a *County*, \$600—the lowest, \$100 (!) ; in a *City*, the highest, \$1,000—the lowest, \$250 ; in a *Town*, the highest, \$1,000—the lowest, \$225 ; in an *Incorporated Village*, the highest, \$1,000—the lowest, \$264. The *average* salary of *male* teachers in *Counties* was \$260—of *female* teachers, \$187 ; in *Cities*, of male teachers, \$597—of female teachers, \$231 ; in *Towns*, of male teachers, \$482—of female teachers, \$226 ; in incorporated villages, of male teachers, \$422—of female teachers, \$190. While the increase in the number of schools reported is 41, and the increase in the number of teachers employed is 111, the increase in the number of pupils is 11,304, and the increase in aggregate sum paid teachers is \$47,515 ; there is no increase in the largest salaries paid teachers, except in towns and villages. Amongst the worst enemies to the efficiency and progress of Public School education, are those trustees and parents whose aim is to get what they mis-call a cheap teacher, and who seek to haggle down the teacher's remuneration to as near starvation point as possible, though, in reality, they are intellectually starving their own children and wasting their time by employing an inferior teacher. Business men find it to their interest to employ good clerks, as one good clerk is worth two poor ones ; and in order to obtain and retain good clerks they pay them good salaries. Experience has long shown the soundness of this business rule and practice in the employment of teachers ; yet how many trustees and parents, in school matters, abandon a rule on which not only the merchant, but the sensible farmer acts in employing labourers, preferring to give high wages for *good* labourers, than to give lower wages to poor labourers.

IV.—TABLE D.—SCHOOL SECTIONS, SCHOOL-HOUSES AND TITLES, SCHOOL VISITS, SCHOOL LECTURES, SCHOOL EXAMINATIONS AND RECITATIONS, TIME OF KEEPING OPEN THE SCHOOLS.

1. The whole number of *School Sections* reported, 4,639—increase, 41, chiefly in new townships. The number of *schools reported as kept open* is 4,566—increase, 42, these mostly in new townships.

2. *Free Schools.*—The number of schools supported entirely by rate on property under this the last year of the old regime, and which may be attended, as a matter of right, by all residents between the ages of 5 and 21 years without payment of fees, is 4,244—increase, 113. The number of schools partly free—that is, with a rate bill of twenty-five cents or less per month—is 322—decrease, 71. I may repeat here, that whether the schools are free or not depends upon the local votes of the ratepayers at their annual meetings in School Sections, and in the election of Trustees in cities, towns and incorporated villages ; but a general wish has been expressed that all the Common Schools should be made free by law. I rejoice to be able to state that after twenty years had elapsed since the question of Free Schools was first left as a subject of discussion and voting at the annual school meetings, the voice of the country which had been so fully and so repeatedly expressed on it, has at length had an utterance in the Legislature, and that, from this present year, (1871), the Public Schools of the Province of Ontario have been declared free to all residents between the ages of 5 and 21 years.

3. The number of *school-houses built during the year* in counties was 176, of which 59 were of brick, 24 of stone, 70 frame, and 13 log, in new townships. Only one school-house in a *city* is reported as having been built during the year ; 1 in *towns*, and none in *incorporated villages*. These built have been all of brick.

4. The whole number of school-houses reported is 4,590, of which 870 are brick, 428 stone, 1,888 frame, 1,406 log—decrease of the last, 63.

5. *Titles to School Sites.*—*Freehold*, 4,150—increase, 72 ; *Leased*, 312—decrease, 34 ; *Rented*, 102—increase, 7 ; not reported, 26.

6. *School Visits.*—By Local Superintendents, 10,448—increase, 260 ; by Clergymen, 6,724—increase, 277 ; by Municipal Councillors, 1,631—increase, 81 ; by Magistrates, 1,705

—decrease, 127 ; by Judges and Members of Parliament, 517—increase, 207 ; by Trustees, 18,724—increase, 111 ; by other persons, 36,058—increase, 419. Total School Visits, 75,807—increase, 1,231, (as against a decrease of 7,366 in 1869). I am happy to state this gratifying fact ; as it does not indicate any diminution of zeal and interest in Public School education on the part of those whose duty, and interest, and privilege it is to elevate and strengthen public opinion in this first work of civilization, and by personal presence and counsel to prompt and encourage the most indifferent parents to educate their children.

7. *School Lectures.*—By Local Superintendents, 2,764—decrease 16 ; by other persons, 290—decrease 57. Whole number of School Lectures, 3,054—decrease 73. The lectures delivered by others than Local Superintendents are, of course, voluntary ; but the law requires that every Local Superintendent (now Inspector) shall deliver, during the year, at least one lecture on education in each School Section under his charge ; and the number of School Sections reported, with schools open in them, is 4,566. There are, therefore, 1,512 School Sections, with schools open, in which the requirement of the law, in regard to delivering an educational lecture, has not been observed. The statistical table shows the counties in which this neglect of duty has occurred. The state of the weather, and the proposed change in the office of Local Superintendent, may, in some instances, have interfered with the discharge of this duty, but it can scarcely account for the failure in 1,512 School Sections. The practice of giving lectures on various subjects is becoming every year more general and popular. It would be singular, indeed, if one lecture a-year in each School Section, on some subject of educational requirement or progress, could not be made instructive and popular. It is, however, gratifying to observe that the number of visits to schools by the late Local Superintendents was equal to the requirements of the law.

8. *Time of Keeping the Schools Open.*—The average time of keeping the schools open, including the holidays, was *eleven months and four days*, in 1870. This is nearly twice the average time of keeping open the Public Schools in the States of Pennsylvania and Ohio, and about three months more than the average time of keeping them open in the States of New York and Massachusetts—arising chiefly from our making the apportionment of the School Fund to School Sections not according to population, but according to the average attendance and the time of keeping open such schools—that is according to the work done in such schools.

9. *Public School Examinations.*—The whole number of Public School Examinations was 7,097—increase 127 ; (as against a decrease of 173 in 1869), though less than two for each school. The law requires that there should be in each school a public *quarterly* examination, of which the teacher should give notice to trustees and parents of pupils, and to the school visitors (clergymen, magistrates, &c.) resident in the School Sections. I think the time has now arrived (under the new and improved system inaugurated by the School Law and Regulations of 1871), to make it my duty hereafter to withhold the apportionment of the School Fund from the schools in which this provision of the law is violated. Good teachers do not shrink from, nor are indifferent to, public examinations of their schools. They seek occasions to exhibit the results of their skill and industry ; but incompetent and indolent teachers shrink from the publicity and labour attendant on public examinations of their schools. The stimulus to progress caused by such examinations, together with tests of efficiency on the part of teachers, and of progress on the part of pupils, cannot fail to produce beneficial effects on parents, pupils and teachers, as well as on the interests of general and thorough Public School education ; and such examinations will doubtless, under the new and improved programme of studies, command a large attendance of parents, trustees, and friends of the pupils of the school.

10. *The Number of Schools holding Public Recitations* of prose or poetry by the pupils was 2,566—increase 154. This exercise should be practised in every school, (and I am glad its use is increasing), as it tends to promote habits of accurate learning by heart, improvement in reading and spelling, and is an agreeable and often amusing diversion for all parties concerned. The little episodes of such exercises in the ordinary routine of school duties exert a salutary influence upon the minds of pupils and are happy interludes in the exercises on days of public examinations ; and the more agreeable and attractive such

exercises, as well as school examinations, can be made, the more rapid and successful will school progress become.

11. *School Prizes and Merit Cards*.—The number of schools in which prizes are reported as having been distributed to reward and encourage meritorious pupils, is 1,345—decrease, 12—though there has been an increase in the aggregate amount of prize books applied for and sent out to the schools. In every instance, as far as I can learn, where the distribution of prizes has not proved both satisfactory and beneficial, the failure may be traced to the want of intelligence or fairness, or both, in the awarding of them. In some cases it may be ascribed to the same causes which caused the violation of the law in not holding public examinations of schools—the want of competence and industry in teachers—their not attending to and recording the individual conduct and progress of each pupil, and, therefore, the absence of data essential to an impartial and intelligent judgment as to the merits of pupils. In other cases, there has been a desire to give something to every pupil without reference to either conduct or progress, in order that none may complain, thus defeating the very object of prizes, and rejecting the principle on which the true system of prizes is established, and on which the Divine Government itself is based, namely, *rewarding every one according to his works*. I may here repeat again what I have already remarked on this subject, that the hackneyed objection as to the distribution of prizes exciting feelings of dissatisfaction, envy and hatred in the minds of those who do not obtain them, is an objection against all competition, and is therefore contrary to every-day practice in all the relations of life. If the distribution of prizes is decided fairly according to merit there can be no *just* ground for dissatisfaction; and facilities are now provided and their employment prescribed, with a view to determine the merit of *punctuality*, of *good conduct*, of *diligence*, of *proficiency* on the part of each pupil during each term of the year—a four-fold motive to exertion and emulation in every thing that constitutes a good pupil and a good school. But the indifferent and flagging teacher does not wish such a pressure to be brought to bear upon his every-day teaching and attention to everything essential to an efficient school; nor does he desire the *test* of a periodical examination of his pupils by an examining committee to be applied to his teaching and management of the school. The objection that the distribution of prizes to deserving pupils excites the envy and hatred of the undeserving, is a convenient pretext to protect and permit incompetence and indifference on the part of the teacher.

But the existence of such alleged dissatisfaction is no reason for refusing rewards to punctuality, to good conduct, to diligence, to proficiency on the part of pupils. There is often great dissatisfaction on the part of unsuccessful candidates and their friends in the results of Municipal and Parliamentary elections, and the distribution of prizes by Agricultural and Horticultural Associations; but this is no argument against the value of free and elective institutions; nor does it prevent the people generally from honouring with their suffrages those on whose merits they place most value, even though they may sometimes err in their judgment. Nor do the managers of Agricultural and Horticultural Societies withhold prizes from the most successful cultivators of grains and vegetables, and fruits and flowers, because of dissatisfaction among the envious of the less diligent and less skilful farmers and gardeners.

It is the very order of Providence, and a maxim of Revelation, that the hand of the diligent maketh rich, while idleness tendeth to poverty; that to him that hath (that is, improves what he hath) shall be given, and the neglecter shall be sent empty away. Providence does not reverse its order of administration, because some persons are discontented and envious at the success of the faithful diligence and skill of others. Nor does Providence appeal alone to the transcendental motives of duty, gratitude, immortality, but presents also the motives of the life that now is, as well as of that which is to come.

I prefer the order of Providence, and the principles on which our civil institutions and all our associations for public and social improvements are conducted, to the dead-level notions of stationary teachers, and the envious murmurings of negligent pupils and their misguided friends.

An explanation of this feature of our school system will be its best justification, and evince its great importance. I therefore present it again as follows:—

A comprehensive catalogue of carefully-selected and beautiful prize books has been

prepared and furnished by the Department to Trustees and Municipalities applying for them ; and, besides furnishing the books at cost price, the Department adds one hundred per cent. to whatever amounts may be provided by Trustees and Municipal Councils to procure these prize books for the encouragement of children in their schools. A series of merit cards, with appropriate illustrations and mottoes, has been prepared by the Department, and is supplied to Trustees and Teachers at a very small charge—half the cost—and these merit cards are to be awarded daily, or more generally weekly, to pupils meriting them. One class of cards is for *punctuality* ; another for *good conduct* ; a third for *diligence* ; a fourth for *perfect recitations*. There are generally three or four prizes under each of these heads ; and the pupil or pupils who get the largest number of merit cards under each head, will, at the end of the quarter or half year, be entitled to the prize books awarded. Thus an influence is exerted upon every part of a pupil's conduct, and during every day of his school career. If he cannot learn as fast as another pupil, he can be as *punctual*, as *diligent*, and maintain as *good conduct* ; and to acquire distinction, and an entertaining and beautiful book, for *punctuality*, *diligence*, *good conduct*, or *perfect recitations* or exercises, must be a just ground of satisfaction, not only to the pupil, but also to his or her parents and friends. There are two peculiarities of this system of merit cards worthy of special notice. The one is, that it does not rest upon the comparative success of single examinations at the end of the term, or half year or year, but on the daily conduct and diligence of each pupil during the whole period, and that irrespective of what may be done or not done by any other pupil. The ill-feeling by rivalry at a single examination is avoided, and each pupil is judged and rewarded according to his merits, as exhibited in his every day school life. The second peculiarity is, that the standard of merit is founded on the *Holy Scriptures*, as the mottoes on each card are all taken from the sacred volume, and the illustrations on each card consist of a portrait of a character illustrative of the principle of the motto, and as worthy of imitation. The prize book system, and especially in connection with that of *merit cards*, has a most salutary influence upon the school discipline, upon both teachers and pupils, besides diffusing a large amount of entertaining and useful reading.

V.—TABLE E.—PRAYERS, READING OF THE SCRIPTURES IN SCHOOLS, TEXT BOOKS, MAPS, APPARATUS.

1. *Prayers and Reading of the Scriptures*.—Of the 4,566 schools reported, the daily exercises were opened and closed with prayers in 3,246 of them—increase, 119 ; and the Bible was read in 3,097—increase, 95. No child can be compelled to be present at religious instruction, reading or exercise, against the wish of his parents or guardians, expressed in writing. The religious instruction, reading and exercises, are, like religion itself, a voluntary matter with trustees, teachers, parents and guardians. The Council of Public Instruction provides facilities, even forms of prayer, and makes recommendations on the subject, but does not assume authority to *enforce* or *compel* compliance with those provisions and recommendations. In some instances the reading and prayers are according to the Roman Catholic Church ; but, generally, those exercises are Protestant. The fact that in 3,246 schools, out of 4,566, religious exercises of some kind are voluntarily practised, indicates the prevalent religious principles and feelings of the people ; although the absence of such religious exercises in a school does not, by any means, indicate the absence of religious principles or feelings in the neighbourhood of such school. There are many religious persons who think the day school, like the farm fields, the place of secular work, the religious exercises of the workers being performed, in the one case as in the other, in the household, and not in the field of labour. But as Christian principles and morals are the foundation of all that is most noble in man, and the great fulcrum and lever of public freedom and prosperity in a country, it is gratifying to see general and avowed recognition of them in the public schools.

2. *Text Books*.—In a previous annual report I explained fully the steps which had been taken and the measures adopted, not only to secure a uniform series of text books for the schools, but a uniform series of excellent Canadian text books, and the complete success of those measures. Table E shows that those text books are now all but universally used,

and also the number of schools in which each of the text books on the various subjects of instruction is used.

3. *Maps, Globes, and other Apparatus.*—The maps and globes, and most of the other apparatus used in the schools, are now manufactured in Canada, forming a new and interesting branch of Canadian manufacture. Blackboards are used in 4,504 (or nearly all) the schools—increase, 82; globes are used in 1,326 schools—increase, 43; maps are used in 3,785 schools—increase, 92. Total maps used in the schools, 28,149—increase, 1,088, (as against an increase of 250 in 1869).

VI.—TABLE F.—ROMAN CATHOLIC SEPARATE SCHOOLS.

1. The number of Roman Catholic Separate Schools is 163—decrease during the year, 2.

2. *Receipts.*—The amount apportioned and paid by the Chief Superintendent from the Legislative Grant to Separate Schools, according to average attendance as compared with that at the Public Schools in the same Municipalities, was \$8,906—increase, \$176. The amount apportioned and paid for the purchase of maps, prize books and libraries, upon the usual condition of an equal sum being provided from local sources, was \$683—increase, 207. The amount of school rates from the supporters of Separate Schools, was \$31,845—increase, \$402. The amount *subscribed* by supporters of Separate Schools, and from other sources, was \$17,065—increase, 962. Total amount received from all sources was \$58,500—increase, \$1,749.

3. *Expenditures.*—For payment of teachers, \$41,738—increase, \$3,109; for maps, prize books and libraries, \$1,766—increase, \$327; for other school purposes, \$14,994—decrease, \$1,688.

4. *Pupils.*—The number of pupils reported as attending the Separate Schools, was 20,652—decrease, 34. Average attendance, 10,035—increase, 1,704.

5. The whole *number of teachers* employed in the Separate Schools, was 236—increase, 8; male teachers, 96—decrease, 8; female teachers, 140—increase, 16. Teachers of religious orders, male, 25—decrease, 5; female, 58—increase, 15.

6. The same table shows the branches taught in the Separate Schools, and the number of pupils in each branch; also the number of schools using maps, apparatus and blackboards.

General Remarks.—1. It is proper for me to repeat the remark, that the Public Schools of Ontario are non-denominational. Equal protection is secured to and enjoyed by every religious persuasion. No child is compelled to receive religious instruction, or attend any religious exercise or reading, against the wishes of his parents or guardians, expressed in writing. I have known no instance of proselytism in the Public Schools, nor have I received, during the year, a single complaint of interference with religious rights so fully secured by law.

2. According to the returns of the religious denominations of teachers, as given in Table C, and noted above, the number of Roman Catholic teachers of the Common Schools is 592, of whom 236 are teachers in Separate Schools. There were, therefore, 356 (increase during the year, 18) Roman Catholic teachers employed in the non-denominational Public Schools—an illustrative proof of the absence of exclusiveness in the local as well as executive administration of the school system, and for which, did the feeling exist, a plea might be made on the ground that general provision has been made for Roman Catholic Separate Schools. I may also observe, that according to the last General Census, there were 464,315 children in Ontario between the ages of 5 and 16 years. Of these, according to the proportion of Roman Catholic population, at least 70,000 must be assumed to be the children of Roman Catholic parents. Of these 70,000 Roman Catholic children, only 20,652 (not one-third of the R. C. school population) attend the Separate Schools; the other two-thirds (allowing even 10,000 as not attending any school) attend the Public Schools, in which no less than 356 Roman Catholic teachers are employed; and yet not a complaint has been made of even attempt at proselytism or interference with religious rights guaranteed by law.

VII.—TABLE G.—GRAMMAR (NOW HIGH) SCHOOLS, RECEIPTS AND EXPENDITURES, PUPILS, FEES, OR FREE SCHOOLS.

Receipts.—The amount of balances from the preceding year (that is, of moneys not paid in by the 31st of December, 1869), was \$11,590—increase, \$1,506. The amount of Legislative Grant for the salaries of teachers, was \$54,695—increase, \$2,592. The amount of Legislative Grant apportioned for *maps, prize books, etc.*, was \$1,348—increase, \$558. The amount of *Municipal Grants* in support of Grammar Schools, was \$43,597—increase, \$8,193. The amount of *pupils' fees*, was \$19,375—increase, \$2,451. Balances of the preceding year and other sources, \$15,000—increase, \$4,211. Total receipts, \$145,607—increase, \$19,514.

Expenditures.—For salaries of masters and teachers, \$105,153—increase, \$8,143: for building, rents and repairs, \$20,390—increase, \$13,011; for fuel, books, and contingencies, \$8,648—increase, \$425; for maps, prize books, apparatus, and libraries, \$3,374—increase, \$1,482. Total expenditure for the year 1870, \$137,566—increase, \$23,063. Balances of moneys not paid out at the end of the year, \$8,041—decrease, \$3,549.

Number of Schools, 101—no increase.

Number of Pupils, 7,351—increase, 743—a large proportionate increase.

VIII.—TABLE H.—NUMBER OF PUPILS IN THE VARIOUS BRANCHES, AND MISCELLANEOUS INFORMATION.

This table shows both the subjects taught and the number of pupils in such subjects in each of the Grammar Schools, the names, university degree or certificate of the Head Masters, and number of teachers employed in each School.

Whole Number of Pupils in English, 7,280—increase, 789; in English Grammar, 7,091—increase, 628; in Spelling and Dictation, 6,958—increase, 891; in Reading, 6,863—increase, 939; in Composition, 4,915—decrease, 100. *Total in Latin*, 6,658—increase, 1,081; in Harkness or Arnold, 5,187—increase, 1,041; in Latin Grammar, 4,371—increase, 487; in Latin Exercises and Prose Composition, 2,467—increase, 471; in Prosody, 564—increase, 6; Reading Caesar, 632—decrease 10; Reading Virgil, 578—decrease, 2; Reading Livy, 138—decrease, 48; Reading Ovid, 129—increase, 34; Reading Cicero, 310—increase, 53; Reading Horace, 243—increase, 37; in Verse Composition, 260—increase, 131. *Total in Greek*, 769—decrease, 89; in Harkness, 468—decrease, 30; in Greek Grammar, 579—increase, 26; in Written Exercises, 413—increase, 1; Reading Lucian, 174—decrease, 34; Reading the Anabasis, 218—decrease, 35; Reading Iliad, 153—increase, 1; Reading the Odyssey, 45—decrease, 18. *Total in French*, 2,850—increase, 434; in French Grammar, 2,586—increase, 461; in Written Exercise and Composition, 2,098—increase, 190; in French Dictation and Conversation, 786—increase, 280; Reading Voltaire's Charles XII., 693—increase, 147; Reading Corneille's Horace, 199—decrease, 42. *Total in Arithmetic*, 7,212—increase, 770. *Total in Algebra*, 3,525—increase, 464. *Total in Euclid*, 2,172—increase, 119; in the higher rules of Arithmetic, 6,115—increase, 695; in the higher rules of Algebra, 2,201—increase, 353; in Euclid, books III. and IV., 855—increase, 68; in Trigonometry or Logarithms, 651—increase, 150; in Mensuration and Surveying, 717—increase, 288; in Ancient Geography, 1,409—increase, 41; in Modern Geography, 6,631—increase, 951. *Total in History*, 5,981—increase, 763; in Ancient History, 1,275—increase, 205; in Physical Science, 1,948—increase, 267; in Christian Morals, 1,437—decrease, 50; in Civil Government, 144—increase, 62; in Writing, 6,399—increase, 730; in Book-keeping and Commercial Transactions, 1,636—increase, 97; in Drawing, 912—increase, 27; in Vocal Music, 490—decrease, 133; in Gymnastics, 431—decrease, 185; in Military Drill, 434—decrease, 404; Schools in which the Bible is used, 60—increase, 3; Schools in which there are daily prayers, 88—same as 1869; Schools under united Grammar and Common School Boards, 62—decrease, 3; number of maps in the Schools, 1,712—increase, 112; number of globes in Schools, 128—decrease, 5; number of pupils who were matriculated at any University during the year, 81—decrease, 6; number of Masters and Teachers employed in 101 Schools, 172—increase, 7.

IX.—TABLE I.—METEOROLOGICAL OBSERVATIONS.

Of late years the practical value of the science of Meteorology has been recognized by all civilized governments, and systems of simultaneous observations have been widely established, the results of which must tend to elucidate the laws which control the atmospheric phenomena. The recent establishment of the storm signal office at Washington, and its extension to this Province, show the great importance of Meteorological observations. The daily weather reports, and the "probabilities" founded on the observations, have been most valuable, instructive and interesting. The system of "drum signals" established on the English coast by the late Admiral Fitzroy, though not appreciated at first, have become a necessity, and, under the good Providence of God, have been the means of averting great destruction of life and property. The same Admiral, when head of the Meteorological Office in England, thus referred to the importance of returns of temperature, and the especial need of observations in British America:—"Tables of the mean temperature of the air in the year, and in the different months and seasons of the year, at above one thousand stations on the globe, have recently been computed by Professor Dove, and published under the auspices of the Royal Academy of Sciences at Berlin. This work, which is a true model of the method in which a great body of Meteorological facts, collected by different observers and at different times, should be brought together and co-ordinated, has conduced, as is well known, to conclusions of very considerable importance in their bearing on climatology, and on the general laws of the distribution of heat on the surface of the globe." In regard to *land stations*, Professor Dove's tables have shewn that data are still pressingly required from the British North American Possessions intermediate between the stations of the Arctic expeditions and those of the United States; and that the deficiency extends across the whole North American continent in those latitudes, from the Atlantic to the Pacific.

The Grammar School System secures the continuous residence of a class of men, at different points, who are well qualified by education to perform the work of observation, and the law authorizes the establishment and maintenance of a limited number of stations, selected by the Council of Public Instruction, with the approval of His Excellency the Lieutenant Governor, at which daily observations are taken of barometric pressure, temperature of the air, tension of vapour, humidity of the air, direction and velocity of the wind, amount of cloudiness, rain, snow, Auroras, and other meteoric phenomena. The observations are taken at 7 a.m., 1 p.m., and 9 p.m. The instruments used have been subjected to the proper tests. Full abstracts of the daily records are sent to the Education Office monthly, in addition to a weekly report of certain observations, which is prepared for publication in any local newspaper the observer may select. Abstracts of the results for each month are regularly published in the *Journal of Education*, and the observers' reports, after strict examination, are arranged and preserved for further investigations.

In my report of 1867, the results of most of the observations were presented in the form of synchronous curves, but as the expense proved an objection, a synopsis is now given in figures. For the same reason the important notes of the observers are omitted.

I have pleasure in adding that the observers are, upon the whole, discharging their duties with fidelity, and that through their exertions the materials for investigating the climatology of the Province are rapidly accumulating.

X.—TABLE K.—NORMAL AND MODEL SCHOOLS.

The recent County examinations throughout the Province have demonstrated the great value and usefulness of the Normal School. Every one of its students who were examined has acquitted himself well. The recent appointments of Dr. Carlyle and Mr. Kirkland to Masterships in the Normal School will contribute still more to its efficiency and value. As the successor of Dr. Sangster, the Rev. Dr. Davies, the new Principal, will be able effectually to sustain the high reputation which the Institution has acquired throughout the country. The whole system has been of late years brought to a degree of thoroughness and practical efficiency, even in its minutest details, that I have not witnessed in any other establishments of the kind. The standard of admission to the

Normal School has been raised much above that of former years, and therefore the entrance examination (which is always in writing) has been made increasingly severe; yet the applications for admission during the present session (August, 1871) have been 198 (larger than for some years), and the failures in examination have been 13—much less proportionally than at the commencement of previous sessions. Upwards of 90 of those admitted have been teachers. The establishment of the third mastership, with a view to give greater prominence to the subject of Natural Science, will have a most beneficial and salutary effect upon the introduction and teaching of those subjects in our Public Schools as required by the new School Act. The applications now on the books for admission to the *Model* Schools, above what can be entertained, are upwards of 600. The newly enlarged buildings for these schools will not only relieve us of this pressure, but will add greatly to the practical character and efficiency of these schools of practice in the Normal School course.

Table K contains three abstracts, the first of which gives the gross number of applications, the number that had been teachers before entering the Normal School, attendance of teachers in training, certificates, and other particulars respecting them during the twenty-one years' existence of the Normal School; the second abstract gives the counties whence the students have come; and the third gives the religious persuasions of the students.

The Table shows that of the 6,069 admitted to the Normal School (out of 6,736 applications) 2,992 of them had been teachers; and of those admitted, 3,129 were males, and 2,940 were females. Of the 3,129 male candidates admitted, 2,088 of them had been teachers; of the 2,940 female candidates admitted, 904 of them had been teachers. The number admitted the first session of 1870 was 159, the second session, 173—total, 332—of whom 220 attended both sessions. Of the whole number admitted, 137 were males, and 195 females. Of the male students admitted, 87 had been teachers; of the female students admitted, 58 had been teachers.

I think it necessary here to repeat the explanations which I have heretofore given respecting the objects and offices of the Normal and Model Schools:—

The Normal and Model Schools were *not* designed to educate young persons, but to *train teachers*, both theoretically and practically, for conducting schools throughout the Province, in cities and towns as well as townships. They are not constituted, as are most of the Normal Schools in both Europe and America, to impart the preliminary education requisite for teaching. That preparatory education is supposed to have been attained in the ordinary public or private schools. The entrance examination to the Normal School requires this. The object of the Normal and Model Schools is, therefore, to do for the teacher what an apprenticeship does for the mechanic, the artist, the physician, the lawyer—to teach him theoretically and practically how to do the work of his profession. No inducements are held out to any one to apply for admission to the Normal School, except that of qualifying himself or herself for the profession of teaching; nor are any admitted except those who in writing declare their intention to pursue the profession of teaching, and that their object in coming to the Normal School is to better qualify themselves for their profession—a declaration similar to that which is required for admission to Normal Schools in other countries. Nor is any candidate admitted without passing an entrance examination in writing, equal to what is required for an ordinary second-class certificate by a County Board.

No argumentation is any longer required to justify the establishment and operations of Normal Schools. The experience and practice of all educating countries have established their necessity and importance. The wonder now is, that while no one thinks of being a printer, a painter, or shoemaker, &c., without first learning the trade, persons have undertaken the most difficult and important of all trades or professions—that which develops mind and forms character—without any preparation for it. The demand for teachers trained in the Normal and Model Schools, and their success, is the best proof of the high appreciation of the value of their services by the country. Of course no amount of culture can supply the want of natural good sense and abilities; but training and culture double the power of natural endowments, and often give to them all their efficiency.

The Model Schools (one for boys and the other for girls), formerly limited to 150

pupils each, will, when the enlargement of the buildings is completed, admit of 100 additional pupils each. The pupils admitted are now required to pay two dollars per month, while the Public Schools of the city are free. These Schools are appendages to the Normal School, and are each under the immediate charge of teachers who have been trained in the Normal School, and are overseen and inspected by the Principal and Masters of the Normal School. The teachers-in-training in the Normal School, divided into classes, spend some time each week in the Model Schools, where they first observe how a *Model School* for teaching Public School subjects is organized and managed; how the pupils are classified, and how the several subjects are taught; and they at length teach themselves, as assistants, under the observation and instruction of the regularly trained teachers of the school, who also make notes, and report from day to day the attention, aptitude, power of explaining, governing, commanding attention, &c. The Principal of the Normal School includes in his instructions a series of lectures on school government, teaching, &c.; and Dr. Hodgins, the Deputy Superintendent of Education, (a member of the Bar) delivers a short course of lectures to the Normal School students on the School Law, and their duties and modes of proceeding respecting it.

XI.—TABLE L.—OTHER EDUCATIONAL INSTITUTIONS.

As the Public and High Schools are only a part of our educational agencies, the Private Schools, Academies and Colleges must be considered in order to form a correct idea of the state and progress of education in this Province. Table L contains an abstract of the information collected respecting these institutions. As the information is obtained and given voluntarily, it can only be regarded as an approximation to accuracy, and, of course, very much below the real facts. According to the information obtained, there are 16 Colleges (several of them possessing eminent powers), with 1,930 students; 284 Academies and Private Schools—increase 5—with 6,562 pupils—increase, 170; which were kept open 11 months, and employed 373 teachers—increase, 21. Total students and pupils, 8,492—increase, 470.

XII.—TABLE M.—FREE PUBLIC LIBRARIES.

1. This Table contains three statements; *first*, of the Municipalities which have been supplied with libraries or additions during the year, and the value and number of volumes to each; *second*, the Counties to which libraries have been supplied during the past and former years, and the value and number of volumes, and also of other public libraries; *third*, the number and subjects of volumes which have been furnished, as libraries and prize books, to the several counties each year since the commencement, in 1853, of this branch of the school system.

2. (*Statement No. 1.*) The amount expended in establishing and increasing the libraries is \$3,395—decrease, \$1,260—of which one-half has been provided from local sources. The number of volumes supplied is 5,024—decrease, 1,404, which is more than made up by the increase of 60,000 in the number of books or prizes sent out.

3. (*Statement No. 2.*) The value of Public Free Libraries furnished to the end of 1870 was \$135,525—increase, \$3,395. The number of Libraries, exclusive of subdivisions, 1,146—increase 39. The number of volumes in these libraries was 239,062—increase, 5,024.

Sunday School Libraries reported, 2,433—increase, 160. The number of volumes in these libraries was 345,855—increase, 10,870.

Other Public Libraries reported, 389—increase, 4. The number of volumes in these libraries was 174,441—increase, 404.

The total number of Public Libraries in Ontario is 3,968—increase, 203. The total of the number of volumes in these libraries is 759,358—increase during the year, 16,298 volumes.

4. (*Statement No. 3.*) This important statement contains the number and classification of public libraries and prize books which have been sent out from the Depository of the Department from 1853 to 1870 inclusive. The total number of volumes for Public Free Libraries sent out, 242,672. The classification of these books is as follows:—*History*,

42,193 ; *Zoology and Physiology*, 15,275 ; *Botany*, 2,811 ; *Phenomena*, 6,108 ; *Physical Science*, 4,772 ; *Geology*, 2,077 ; *Natural Philosophy and Manufactures*, 13,152 ; *Chemistry*, 1,540 ; *Agricultural Chemistry*, 794 ; *Practical Agriculture*, 9,592 ; *Literature*, 23,272 ; *Voyages*, 20,989 ; *Biography*, 27,977 ; *Tales and Sketches*, *Practical Life*, 68,153 ; *Fiction*, 1,015 ; *Teachers' Library*, 2,952. Total number of *Prize Books* sent out, 503,449. *Grand total* of library and prize books (including, but not included in the above, 14,379 volumes sent to Mechanics' Institutes and Sunday Schools, paid for wholly from local sources), 759,884.

5. In regard to the Free Public Libraries, it may be proper to repeat the explanation that these libraries are managed by Local Municipal Councils and School Trustees (chiefly by the latter), under regulations prepared according to law by the Council of Public Instruction. The books are procured by the Education Department, from publishers both in Europe and America, at as low prices for cash as possible ; and a carefully-prepared classified catalogue of about 4,000 works (which, after examination, have been approved by the Council of Public Instruction) is printed, and sent to the Trustees of each School Section, and the Council of each Municipality. From this select and comprehensive catalogue the local municipal and school authorities desirous of establishing and increasing a library select such works as they think proper, or request the Department to do so for them, and receive from the Department not only the books at prices about from twenty-five to thirty per cent. cheaper than the ordinary retail prices, but an apportionment in books of 100 per cent. upon the amount which they provide for the purchase of such books. None of these works are disposed of to any private parties, except Teachers and School Inspectors, for their professional use ; and the rule is not to keep a large supply of any one work on hand, so as to prevent the accumulation of stock, and to add to the catalogue yearly new and useful books which are constantly issuing from the European and American Press. There is also kept in the Department a record of every public library, and of the books which have been furnished for it, so that additions can be made to such libraries without liability to send second copies of the same books.

XIII.—TABLE N.—SUMMARY OF THE MAPS, APPARATUS, AND PRIZE BOOKS SUPPLIED TO THE COUNTIES, CITIES, TOWNS AND VILLAGES DURING THE YEAR.

1. The amount expended in supplying maps, apparatus, and prize books for the schools, was \$28,810—increase, \$4,345. The one-half of this sum was provided voluntarily from local sources ; in all cases the books or articles are applied for and fifty per cent. of the value paid for by the parties concerned before being sent. The number of Maps of the World sent out was 136 ; of Europe, 221 ; of Asia, 185 ; of Africa, 164 ; of America, 180 ; of British North America and Canada, 238 ; of Great Britain and Ireland, 188 ; of Single Hemispheres, 153 ; of Scriptural and Classical, 135 ; of other charts and maps, 269 ; of globes, 109 ; of sets of apparatus, 62 ; of other pieces of school apparatus, 612 ; of Historical and other Lessons, in sheets, 5,880. Number of volumes of *prize books*, 60,655.

2. It may be proper to repeat that the map, apparatus, and prize book branch of the School System was not established till 1855. From that time to the end of 1870 the amount expended for maps, apparatus, and prize books (not including Public Libraries), was \$293,043, one-half of which has been provided from local sources, from which all applications have been made. The number of Maps of the *World* furnished is 2,451 ; of *Europe*, 3,822 ; of *Asia*, 3,086 ; of *Africa*, 2,851 ; of *America*, 3,231 ; of *British North America and Canada*, 3,593 ; of *Great Britain and Ireland*, 3,688 ; of *Single Hemispheres*, 2,548 ; of *Classical and Scriptural Maps*, 2,628 ; *other maps and charts*, 5,444 ; *globes*, 1,942 ; *sets of apparatus*, 411 ; single articles of school apparatus, 14,615 ; *Historical and other Lessons in sheets*, 154,212 ; *volumes of Prize Books*, 503,449.

3. I also repeat the following explanation of this branch of the Department :—

The maps, globes, and various articles of school apparatus sent out by the Department, apportioning one hundred per cent. upon whatever sum or sums are provided from local sources, are nearly all manufactured in Ontario, and at lower prices than imported articles of the same kind have been heretofore obtained. The globes and maps manufactured (even the material) in Ontario contain the latest discoveries of voyagers and travellers, and are executed in the best manner, as are tellurians, mechanical powers, numeral

frames, geometrical powers, &c., &c. All this has been done by employing competitive private skill and enterprise. The Department has furnished the manufacturers with copies and models, purchasing certain quantities of the articles when manufactured, at stipulated prices, then permitting and encouraging them to manufacture and dispose of these articles themselves to any private parties desiring them, as the Department supplies them only to municipal and school authorities. In this way new domestic manufactures are introduced, and mechanical and artistical skill and enterprise are encouraged, and many aids to school and domestic instruction, heretofore unknown amongst us, or only attainable in particular cases with difficulty, and at great expense, are now easily and cheaply accessible to private families, as well as to municipal and school authorities all over the country. It is also worthy of remark, that this important branch of the Education Department is self-supporting. All the expenses of it are reckoned in the cost of the articles and books procured, so that it does not cost either the public revenue or school fund a penny beyond what is apportioned to the Municipalities and School Sections providing a like sum or sums for the purchase of books, maps, globes, and various articles of school apparatus. I know of no other instance, in either the United States or in Europe, of a branch of a Public Department of this kind conferring so great a benefit upon the public, and without adding to public expense.

The following Tables will also be found of much interest in connection with this part of our School System.

TABLE SHEWING THE VALUE OF ARTICLES SENT OUT FROM THE EDUCATION DEPOSITORY DURING THE YEARS 1851 TO 1870, INCLUSIVE.

YEAR.	Articles on which the 100 per cent. has been apportioned from the Legislative Grant.		Articles sold at Catalogue prices without any apportionment from the Legislative Grant.	Total value of Library, Prize and School Books, Maps and Apparatus despatched.
	Public School Library Books.	Maps, Apparatus and Prize Books.		
	Dollars.	Dollars.	Dollars.	Dollars.
1851.....			1,414	1,414
1852.....			2,981	2,981
1853.....			4,233	4,233
1854.....	51,376		5,514	56,890
1855.....	9,947	4,655	4,389	18,991
1856.....	7,205	9,320	5,726	22,251
1857.....	16,200	18,118	6,452	40,770
1858.....	3,982	11,810	6,972	22,764
1859.....	5,805	11,905	6,679	24,389
1860.....	5,289	16,832	5,416	27,537
1861.....	4,084	16,251	4,894	25,229
1862.....	3,273	16,194	4,844	24,311
1863.....	4,022	15,887	3,461	23,370
1864.....	1,931	17,260	4,454	23,645
1865.....	2,400	20,224	3,818	26,442
1866.....	4,375	27,114	4,172	35,661
1867.....	3,404	28,270	7,419	39,093
1868.....	4,420	25,923	4,793	35,136
1869.....	4,655	24,475	5,678	34,808
1870.....	3,396	28,810	6,175	38,381

BOOK IMPORTS INTO ONTARIO AND QUEBEC.

The following Statistical Table has been compiled from the "Trade and Navigation Returns" for the years specified, showing the gross value of books (not maps or school apparatus) imported into Ontario and Quebec.

YEAR.	Value of Books entered at Ports in the Province of Quebec.	Value of Books entered at Ports in the Province of Ontario.	Total value of Books imported into the two Provinces.	Proportion imported for the Education Department of Ontario.
1850.....	\$101,880	\$141,700	\$243,580	\$84
1851.....	120,700	171,732	292,432	3,296
1852.....	141,176	159,268	300,444	1,288
1853.....	158,700	254,280	412,980	22,764
1854.....	171,452	307,808	479,260	44,060
1855.....	194,356	338,792	533,148	25,624
1856.....	208,636	427,992	636,628	10,208
1857.....	224,400	309,172	533,572	16,028
1858.....	171,255	191,942	363,197	10,692
1859.....	139,057	184,304	323,361	5,308
1860.....	155,604	252,504	408,108	8,846
1861.....	185,612	344,621	530,233	7,782
1862.....	183,987	249,234	433,221	7,800
1863.....	184,652	276,673	461,325	4,085
1 of 1864.....	93,308	127,233	220,541	4,668
1864-5.....	189,386	200,304	389,690	9,522
1865-6.....	222,559	247,749	470,308	14,749
1866-7.....	233,837	273,615	507,452	20,743
1867-8.....	*224,582	*254,048	478,630	12,374
1868-9.....	278,914	373,758	652,672	11,874
1869-1870.....	220,371	351,171	571,542	13,019

XIV.—TABLE O.—SUPERANNUATED AND WORN-OUT TEACHERS OF PUBLIC SCHOOLS.†

1. This table shows the age and service of each pensioner, and the amount which he receives. The system, according to which aid is given to worn-out Public School teachers, is as follows:—In 1853 the Legislature appropriated \$2,000, which it afterwards increased to \$4,000 per annum, in aid of superannuated or worn-out Public School teachers. The allowance cannot exceed \$6 annually for each year the recipient has taught school in Ontario. Each recipient must pay a subscription to the Fund of \$4 for the current year, and \$5 for each year since 1854, if he has not paid his \$4 any year; nor can any teacher share in the fund unless he pays annually at that rate, commencing at the time of his beginning to teach, or with 1854 (when the system was established) if he began to teach before that time. When a teacher omits his annual subscription, he must pay at the rate of \$5 for that year in order to be entitled to share in the fund when worn out. When the fund is not sufficient (as it never has been since the first year of its administration) to pay each pensioner the full amount permitted by law, it is then divided among the claimants according to the number of years each one has taught. To secure equality, each claimant is paid in full the first year, less the amount of his subscriptions required by law to be paid.

2. It appears from the Table that 256 have been admitted to receive aid, of whom 125 have died, have not been heard from, or have resumed teaching, or have withdrawn from the fund before or during the year 1870, the amount of their subscriptions having been returned to them.

3. The average age of each pensioner in 1870 was 68 years; the average length of time of service in Ontario was 21 years. No time is allowed applicants except that which has been spent in teaching a Public School in Ontario; though their having taught School many years in England, Ireland, Scotland, or the British Provinces, has induced

* Estimate. † NOTE.—I have fully discussed the provisions of the new law on this subject in a subsequent part of my report.

the Council, in some instances, to admit applicants to the list of worn-out Public School teachers after teaching only a few years in this Province, which would not have been done had the candidate taught, altogether, only a few years of his life.

4. My report in former years contained the names of the parties on whose testimony the application in regard to each case was granted, together with the county of each pensioner's residence. That part of the table has been omitted in my last reports to save the expense of printing, though the record is preserved in the Department for reference, if occasion require.

XV.—TABLE P.—EDUCATIONAL SUMMARY FOR 1870.

This table exhibits, in a single page, the number of Educational Institutions of every kind, as far as I have been able to obtain returns, the number of students and pupils attending them, and the amount expended in their support. The whole number of these institutions in 1870 was 4,970—*increase*, 47; the whole number of students and pupils attending them was 459,161—*increase*, 11,001; the total amount expended for all educational purposes was \$2,173,711—*increase*, \$113,927. The total amount *available* for educational purposes was \$2,414,056—*increase*, \$140,152.

XVI.—TABLE Q.—GENERAL STATISTICAL ABSTRACT OF THE PROGRESS OF EDUCATION IN ONTARIO, FROM 1842 TO 1869 INCLUSIVE.

It is only by comparing the number and character of Educational Institutions at different periods, the number of pupils attending them, and the sums of money provided and expended for their support, that we can form a correct idea of the educational progress of a country. The statistics for such comparisons should be kept constantly before the public mind to prevent erroneous and injurious impressions, and to animate to efforts of further and higher advancement.

Congratulations have often been expressed at the great improvements which have been made in all our institutions of education, in regard both to the subjects and methods of teaching, as in the accommodations and facilities of instruction; also in the number of our Educational Institutions, in attendance upon them, and in the provision for their support. But it is only by analyzing and comparing the statistics contained in Table Q, that a correct and full impression can be formed of what has been accomplished educationally in Ontario during the last twenty years. Take a few items as examples. From 1848 to 1870 the number of Public Schools has been increased from 2,800 to 4,403, and the number of pupils attending them from 130,739 to 421,866. The amount provided for the support of Public Schools has been increased since 1848 from \$344,276 to \$1,222,681, besides the amount provided for the purchase, erection, repairs of school-houses, etc., of which there are no reports earlier than 1850, but which at that time amounted to only \$56,756, but which in 1870 amounted to \$189,380—making the aggregate for Public School purposes in 1870 \$1,712,061. Then the number of free schools since 1850 has increased from 252 to 4,244; to which are to be added the Normal and Model Schools, the system of uniform text-books, maps, globes, apparatus (of domestic manufacture), prize books and public libraries.

XVII. THE EDUCATIONAL MUSEUM.

Nothing is more important than that an establishment designed especially to be the institution of the people at large—to provide for them teachers, apparatus, libraries, and every possible agency of instruction—should, in all its parts and appendages, be such as the people can contemplate with respect and satisfaction, and visit with pleasure and profit. While the schools have been established, and are so conducted as to leave nothing to be desired in regard to their character and efficiency, the accompanying agencies for the agreeable and substantial improvement of all classes of students and pupils, and for the useful entertainment of numerous visitors from various parts of the country, as well as

many from abroad, have been rendered as attractive and complete as the limited means furnished would permit. Such are the objects of the Educational Museum.

The Educational Museum is founded after the example of what has been done by the Imperial Government as part of the system of popular education—regarding the indirect as scarcely secondary to the direct means of forming the taste and character of the people.

It consists of a collection of school apparatus for Public and High Schools, of models of agricultural and other implements, of specimens of the natural history of the country, casts of antique and modern statues and busts, &c., selected from the principal museums in Europe, including the busts of several of the most celebrated characters in English and French history; also, copies of some of the works of the great masters in Dutch, Flemish, Spanish, and especially of the Italian schools of painting. These objects of art are labelled for the information of those who are not familiar with the originals, but a descriptive historical catalogue of them is in course of preparation. In the evidence given before the Select Committee of the British House of Commons, it is justly stated that “the object of a National Gallery is to improve the public taste, and afford a more refined description of enjoyment to the mass of the people;” and the opinion is at the same time strongly expressed that as “people of taste going to Italy constantly bring home beautiful copies of beautiful originals,” it is desired, even in England, that those who have not the opportunity or means of travelling abroad, should be enabled to see, in the form of an accurate copy, some of the works of Raffaele and other great masters; an object no less desirable in Canada than in England. What has been thus far done in this branch of public instruction is in part the result of a small annual sum which, by the liberality of the Legislature, has been placed at the disposal of the Chief Superintendent of Education, out of the Ontario Educational Grants, for the purpose of improving school architecture and appliances, and to promote art, science and literature, by the means of models, objects and publications, collected in a Museum connected with the Department.

The more extensive Educational Museum at South Kensington, London, established at great expense by the Committee of Her Majesty’s Privy Council of Education, appears, from successive reports, to be exerting a very salutary influence, while the School of Art connected with it is imparting instruction to hundreds in drawing, painting, modelling, &c.

A large portion of the contents of our museum has been procured with a view to the School of Art, which has not yet been established, though the preparations for it are completed. But the Museum has been found a valuable auxiliary to the schools; the number of visitors from all parts of the country, as well as from abroad, has greatly increased during the year, though considerable before; many have repeated their visits again and again; and I believe the influence of the Museum quite corresponds with what is said of that of the Educational Museum of London.

The means employed for improving the Museum during the last two years were detailed in my last Annual Report; and the additions, made at a comparatively small expense, are of great variety and value.

XVIII.—REPORT OF THE INSPECTOR OF GRAMMAR (NOW HIGH) SCHOOLS.

I beg to direct special attention to the practical and excellent Report of the Inspector of Grammar (now High) Schools, which will be found in Appendix A. The Report of the Inspector (the Rev. J. G. D. Mackenzie, M. A.) this year, as in former years, is alike kind and faithful, and is replete with practical remarks and suggestions; it points out clearly the defects of many, both High and Public Schools, and shows clearly in the interests of higher English, as well as of sound classical education, the necessity of the revision of the system, as contemplated by the principal provisions of the High School Bill, which were adopted this year by the Legislative Assembly. I am glad that, under the new Act, the principle of apportioning the High School Fund, according to *results* of teaching, and not merely according to numbers, will be carried out.

XIX.—EXTRACTS FROM REPORTS OF LOCAL SUPERINTENDENTS OF COMMON SCHOOLS.

In most school reports both in Great Britain and the neighbouring States, a large space is devoted to extracts from local reports, as illustrating the practical working of the system, the inner and practical life of the people in their social relations and development

—the intelligent and noble struggles of some new settlements to educate their children, and the shameful negligence of some old settlements in regard to the education of their children.

Character of these Reports.—It was thought desirable this year, with a view to save expense, to omit most of the usual extracts from the reports of Local Superintendents of townships, cities, towns, and incorporated villages. But the extracts, among other things above noticed, establish the following facts :—

1. *Apathy and Selfishness a cause of Backwardness.*—That the inefficiency and stationary condition of the schools in many places does not arise from any complained of defects in the School Law or system, but in most instances from the apathy and misguided selfishness of the parties concerned—in a few instances from the newness and poverty of the settlements.

2. *Spirit and Enterprise of Old and New Townships contrasted.*—That, on the contrary, the gratifying advancement of the schools in other places does not depend upon the age or wealth of the settlement, but upon the spirit of the people. Some of the oldest settlements of the Province in the River and Lake Townships of the County of Welland, and on the River St. Lawrence, are far behind the greater part of the newer townships.

3. *Eastern and Western parts of Ontario compared.*—That, as a general rule, the Eastern section of Ontario, East of Kingston—the County of Lanark excepted—are far less advanced and far less progressive than the Western part of the Province, except some old townships on the Rivers Niagara and Detroit, and on Lake Erie. This will be strikingly seen on reference to the library map published in my report of a previous year.

4. *Best Teachers the Cheapest.*—That the best made shoes, and waggons, and fences, and farm tools are the most serviceable and cheapest in the long run, so the best teachers, and school-houses and furniture, are by far the cheapest, as well as the most profitable for all parties and all the interests of education and knowledge.

5. *Evils of the "Cheap" Teachers.*—That the most serious obstacles to the education of children in many parts of the country are bad school-house accommodation, and the employment of incompetent and misnamed "cheap" teachers; the only remedy for which is requiring proper school-house accommodation, doing away with the lowest class of teachers, and prescribing a minimum teacher's salary which will secure the employment and continuance in the profession of competent teachers. This is what the country, as a whole, owes to itself, as well as to the helpless and injured youthful members of it.

6. *Competitive Examinations and Prizes.*—That competitive examinations of schools, and the distribution of prizes to reward and encourage *punctuality, good conduct, diligence and perfect recitations* of pupils, form a powerful element for improving the schools, and animating teachers and pupils to exertion. In all the local reports, there is scarcely a dissenting voice as to the salutary influence of distributing prizes as an encouragement and reward to meritorious pupils in the schools. The two or three instances in which a doubt as to their beneficial influence has been expressed, have been where the prizes have been distributed in an exceptional manner—by the teacher alone, or upon the single ground of cleverness or success at final examinations, and not embracing rewards also for *punctuality, good conduct, diligence* (as suggested and provided for by the four classes of merit cards), as well as for perfect recitations. The testimony is unanimous and unqualified as to the very beneficial influence upon teachers and pupils of competitive examinations among the pupils of the several schools of a township. The two-fold objection heretofore urged in a few instances is now seldom repeated, namely, that the distribution of prizes is not an appeal to the high motives of *duty*, but to the lower motive of selfishness, as if the Bible does not from beginning to end urge the motive of reward as well as of duty upon human beings of all ranks and ages; and, secondly, that of discriminating between pupils and rewarding the meritorious excites jealousy and hatred in the minds of the undistinguished and unrewarded—an objection according to the principle of which, punctual, well conducted, diligent and successful men in life ought not to be rewarded by any respect or notice, or increase of wealth, over the negligent, lazy and worthless, lest the latter should envy the former! Whereas the principle of Providence as well as of Revelation is, that the hand of the diligent maketh rich, while idleness tendeth to poverty, and that every man—in childhood as well as in manhood—shall be rewarded according to his works.

XX.—GENERAL REMARKS ON THE SCHOOL LAW IMPROVEMENT ACT OF 1871.

PRELIMINARY OBSERVATIONS.

So many and important have been the changes recently made in the law affecting our System of Public Instruction, that it may be well, as a preliminary to a discussion of those changes, briefly to refer to a few facts relating to the history and progress of our School System.

In 1844, when I had the honour to take charge of the Education Department, our municipal system (on which our then elementary School Law was engrafted), was in its infancy. The principle of local self government was new, and much opposition was experienced in giving effect to the School Law then in operation. The theory of local taxation for the support of schools was in some places vigorously opposed, and in others regarded as a doubtful experiment. Even as late as 1850, some municipalities refused to accept the improved law enacted that year, or act under its provisions, and thus deprived their constituents of the great boon of popular education. It is only six years since the last disability, caused by such refusal, was removed,—thus uniting the entire Province in a cordial acceptance of the School Law.

The following brief statistical references will illustrate the growth and prosperity of our School System :—

In 1844, there were but 2,610 Public Schools, in 1870, there were 4,566. In that year, (1844), the school population was 183,539—of which 96,756 children attended the Public Schools, while 86,783 (or nearly as many more) were reported as not in attendance at any school whatever.

In 1870, the school population was 483,966 - of which 420,488 children were in attendance in our schools, and 63,478 reported as not in attendance—not one-seventh, instead of nearly one-half of the children of School age, as in 1844. In 1844, the whole sum available for the support of the Public Schools was about \$280,000—of which, approximately, \$190,000 were raised by local taxation.* In 1870, the whole sum available for Public Schools was \$1,712,060—of which \$1,336,383 were raised by local taxation and fees—an increase of more than seven hundred per cent over 1844!

Such are the three main facts illustrative of the progress of our Public School System during the last quarter of a century. Those who are familiar with our educational history during that period will remember the fierce opposition which some of what are now regarded as the essential features of our School Law encountered ; but yet, under the Divine blessing, our schools and School System have, nevertheless, so steadily progressed and prospered, that there are few Canadians who do not now refer with unmixed pride and satisfaction to the vastly improved condition of our Public Schools under the operation of the present law, as revised in 1850.† On no one point have we greater cause for thankfulness and congratulation, than in the fact of the unanimity and cordiality with which our School System is supported by all classes of the community, by men of all shades of political feeling, and, with a single exception (and that in part only), of all religious persuasions in the Province.

OBJECTIONS TO IMPROVE OUR SCHOOL SYSTEM ANSWERED.

It is a singular and gratifying (yet in some respect it has proved an embarrassing) fact that the chief difficulty experienced in promoting the improvement of our School System has arisen from the somewhat over-sensitiveness of the friends of our Schools, lest the proposed changes should disturb the foundations of a system which they had learned to regard with so much favour and affection. This solicitude arose partly from a mistaken

* NOTE.—In 1850, (the first year in which we have positive information on this subject), we find that the total sum expended in this Province for public elementary education, was \$410,472 ; of which \$326,472 were raised by local rates and fees.

† NOTE.—No one is more sensible than I am of the numerous defects of our School system, and for this reason I have laboured all the more assiduously to have these defects removed by our recent School Legislation. As I have stated further on, I have even had to combat the views of those friends of the system who had thought that it was not susceptible of much improvement.

view of the condition and necessities of our system, and partly from a misapprehension of the scope and objects of the proposed ameliorations in our School Law. It will be my aim, however, in the following remarks to justify and illustrate the principles and policy involved in the recent important changes which have been made in our School Law.

I would, in the first place, remark that were we, in making improvements in our School System, to confine our observation and experience to our own Province alone, we might be disposed to look with complacency upon that system, and to rest satisfied with the progress which we have already made. The effect of such a state of feeling would be that we would seek to profit little by the educational experience and advancement of other countries. But such a short-sighted and unpatriotic course, though approved by some on the principle of "let well-alone," yet would not commend itself to the maturer judgment of those who are accustomed to look at the "stern logic of facts," and to take a comprehensive and practical view of the underlying causes of the social progress in other countries.

We are a young country, placed in close proximity to a large and wonderfully progressive people. In the good providence of God, we are permitted to construct on the broad and deep foundations of British liberty, the corner stone of a new nationality, leaving to those who come after us to raise the stately edifice itself. Apart from the vital Christianity of our people, what more lasting bond and cement of society in that new nationality, than a free and comprehensive system of Christian education for the youth of the land, such as we have sought to establish? Our aim should, therefore, be to make that system commensurate with the wants of our people, in harmony with the progressive spirit of the times, and comprehensive enough to embrace the various branches of human knowledge which are now continually being called into requisition in the daily life of the farmer, the artizan, and the man of business. In no department of social and national progress have our neighbours made greater advances, or prided themselves more justly, than in that of free popular education. On the other hand, in no feature of progress under British institutions up to a late period has there been less satisfaction, as a whole, or less positive advancement than in that of public education. By many of our neighbours on the other side of the lines, such inertness and non-appreciation of a vital part of national life has been regarded as inherent in monarchical institutions. The fact, however, has been overlooked that the lingering effects of the long prevalence in Britain of the feudal theory, on which her social and political institutions were originally founded, has, in spite of various ameliorations in the condition of her people, exercised a sure but silent influence against the earlier adoption of the principle of the free and universal education of the people. But so surely and certainly has this latent feeling of opposition to popular education given way before the prevalence of more enlightened views, that, even in the most monarchical countries of Europe, the desire felt and the efforts put forth for the diffusion of public education in all its comprehensiveness and fulness have been remarkable. Nevertheless, even among ourselves, that principle of latent opposition to popular education did exist in the earlier stages of our educational history. Its gradual removal, therefore, under the beneficent operation of our School Laws, and the prevalence of juster and more patriotic views in matter of education are subjects of sincere congratulation to our people.

ILLUSTRATIONS OF EDUCATIONAL PROGRESS IN OTHER COUNTRIES.

It will be my object briefly to refer to the educational progress of other countries, so far as they illustrate the necessity for improvements in our own laws, and then in the light of such facts and references, discuss the recent improvements and amelioration which have been made in our own School System.

THE EDUCATIONAL SYSTEM OF PRUSSIA.

As one of the incidents of our educational history, it will be remembered how vehemently the so called "Prussian despotism" of certain features of our School System of twenty years ago was denounced by an influential section of the press. Yet the facts of our subsequent experience have shown how utterly futile were these objections; and so it will be in regard to those portions of our new law which have lately been equally the

objects of similar opposition and misrepresentation. Even in regard to the very Prussian system of education, so strongly objected to at one time in this Province, the history of Prussia during the last few years has demonstrated how sagacious and wise were those provisions of her school law which were professedly regarded as the most objectionable. In the recent report (1868) of the third and latest of Her Majesty's Commissions, appointed to complete the educational enquiry, instituted years before, we have the following "Estimate of the Prussian System of Schools."

"When we view it as a whole, the Prussian system appears to be at once the most complete and the most perfectly adapted to its people of all that now exist. It is not wanting in the highest cultivation like the American, nor in dealing with the mass of the middle classes like our own; nor does it run any risk of sacrificing everything else to intellectual proficiency like the French. It is somewhat more bureaucratic in its form than would work well in England, but it is emphatically not a mere centralized system in which the government is everything. In France the central government is undeniably distinct from the people; supported by the people no doubt, and obeyed by them, but distinct from them. *But in Prussia the Education Department is simply the instrument which the people use to procure the fulfilment of their own desires.* The Prussians believe in culture, and, whoever may have originally created the educational machinery, that machinery has now been appropriated by the people themselves. They are proud of their schools, and will not allow the Government 'to sacrifice them to any other interests, and however greatly political considerations may be paramount in other departments of administration, in this they are not.' The result is an unrivalled body of teachers, schools meeting every possible need of every class, and a highly cultivated people."

Every enlightened country in Europe is at this moment disposed to learn lessons of educational wisdom from Prussia. England has not failed within the last year or two to profit largely by her experience; and even Austria herself, which Prussia humbled in the dust, has hastened to adapt to her own circumstances and, within a year or two, has put in force a comprehensive system of education, founded on that of her rival and conqueror.

THE NEW SCHOOL LAW OF AUSTRIA.

It has been said that the Prussian Common School fought and won the decisive battle of Sadowa; that while the physique of the flower of Austria's troops which fell in that memorable battle was superior to that of the Prussians, yet their skill and intelligence was greatly inferior. And, although, in the unparalleled success of the Germans in France, the same disparity on either side may not have been so marked, yet in the ample preparation, the perfectness of detail, the wonderful skill and intelligent resource of the Prussians in every emergency, they excited the wonder and astonishment of both Europe and America.* And while England has promptly sought to profit by the military experience of Prussia, and recently on the plains of Hampshire has sought to demonstrate the falsity of the alleged facts and theory of the apocryphal "Battle of Dorking," Austria has set herself carefully to study the latent causes of the vast intelligent superiority of her late foe and rival. Within the last year or two she has enacted a most comprehensive School Law, a summary of which is thus given in the last Report of the United States Commissioner of Education for 1870, as follows:—

"One of the greatest benefits yet conferred upon the working classes of Austria is

* NOTE.—This point is very forcibly put by Dr. Lyon Playfair, in his address as President of the Education Section of the Social Science Congress of 1870. He says:

"Prussia has lately shown what education can achieve in the union and advancement of a people. Even in the least productive of arts—that of war—see how she is served by the universal education of the soldiers. In England, the conception of a soldier is that of a mere obedient tool in the hands of an Officer; the Prussian conception is that a soldier should not only be obedient, but also self intelligent. *Trusting to this intelligence, maps of the invaded district were distributed among the privates who have the main geographical features thoroughly explained to them, so that every private can co-operate intelligently with his General.* In the present war we have been startled to hear of large bodies of French soldiers cut off by losing their way in their own country. *No German losses from such ignorance are recorded.* In fact, two countries in these days are not fairly matched in war, whatever may be the personal valour of their inhabitants, when one, like France, has 28 per cent. (more than one fourth) of her soldiers unable to read and write, while the other, like Germany, has not 3 per cent. Knowledge is as important as valour in modern combats."

“the general School Bill of the 14th of May, 1869, which renders national education compulsory, and greatly elevates the standard of it. In accordance with this law, compulsory attendance at school begins with every child at the age of six, and is continued uninterruptedly to the age of fourteen. But even then (that is to say at the end of his fourteenth year), the child is only allowed to leave school on production of certified proof that he has thoroughly acquired the full amount of information which this great law fixes as the *sine qua non* minimum of education for every Austrian citizen. The prescribed educational course comprises reading, writing and arithmetic; a sound knowledge of the native language, history, and chiefly, though not exclusively, that of the native country, embracing the political constitution and general social structure of it; geography in the same sense, all the more important branches of physical science, geometry, geometrical drawing, &c., singing, athletic exercises. Children employed in the large factories, or prevented by special circumstances from attending the communal school, may complete or continue their education at any special school supported by their employer, and the employers are authorized to found schools for that purpose. But it is a *sine qua non* condition that all such schools shall provide the full amount and quality of education required by law, and otherwise fulfil all the obligations prescribed by the general School Bill, which subjects every school, whether private or public, to the inspection of the State. In places where a special trade school exists, the employer is bound to send his apprentices to it. In addition to the subjects of instruction above enumerated, every child is simultaneously provided with religious instruction in the creed to which he or she is born. The local ecclesiastical authorities or notables of the church or religious community to which each child belongs are entitled, and indeed bound, by law to provide competent teachers for this purpose. The free selection of the teachers is left entirely to these religious bodies, subject only to the certified proofs which the State exacts of the teacher's proficiency and general character. It is only in the event of the local religious communities declining to avail themselves of the privilege allotted to them by the law, that the State steps in and undertakes the duty which they refuse to discharge. But this religious instruction, which is altogether denominational and on a footing of impartial equality for all religious sects, is kept by the State carefully apart from the secular education, which is, in every case, obligatory, and which it is in no case allowed to interfere with or attempt to control. Nor are any private schools tolerated by the government which do not efficiently provide the prescribed amount of secular instruction; although, so long as this condition be fulfilled, the law imposes no limit to the foundation of private educational establishments. Such is the education now provided in Austria for every child of the working classes.”

THE FRENCH SYSTEM OF EDUCATION.

The English Commissioners, already quoted, say:—

“The French system, as judged from an English point of view, appears to have the merit of being a perfect piece of machinery for the cultivation of the intellect. On the moral side it seems to be weak, and there are some appearances of its having a deficiency just like our own, namely, in the education put within the reach of the superior artisans and smaller shopkeepers. The Schools are of two chief grades—first, the Primary; secondly, the Colleges Communaux and Lycees. In arithmetic, mathematics, and natural science in the French Schools, we are much inferior. They know their own literature better than our boys know ours. The real advantage which they have is, that, though their classical culture is not carried so far, the boys are more generally brought up to the mark in all their studies. There are two main reasons for this: the careful preparation of their teachers for their profession, and the system of supervision. Nothing can exceed the care with which the teachers are fitted for their work. The best come from the great Normal School at Paris. This School, at which board, lodging, and instruction are all free, is filled from the Lycees by competition among all those who wish to enter the profession. The very élite of the students being thus got together, are taught by the best professors in France, with a perpetual view to their becoming teachers. Finally, no one, either from this School or any other, is placed on the staff of a Public

“School without having passed a very strict examination in the precise subjects which he is to teach, and having given a lesson, as if to a class, as a part of that examination. Still further to secure the perfection of the machinery, the lessons in the schools given by these teachers, who are called professors, all precisely follow a given curriculum. Every lesson of every hour throughout all the schools, is prescribed by the central government; and the professors prepared to do a definite task are kept to that task, and no other. Further, they are set free from every duty but that of giving the lessons. The moral training and the discipline of all the scholars, and the domestic management of the boarders, are entrusted to different officers,—the *Proviseur*, the *Censeur*, and the *Econôme*. They have not even the task of seeing that their pupils learn their lessons. This is entrusted to an inferior set of men—the *maîtres d'étude*. The management is in the hands of the Minister of Public Instruction, whose power regulates even the minutest details. He is assisted by an Imperial Council of Public Instruction, containing some of the most eminent literary and scientific men of France; and by 18 Academic Councils, corresponding to the 18 Academies which divide France between them for the purposes of professional instruction. Every important school is annually inspected and reported on; all the scholars annually examined.”

THE SWISS SYSTEM OF EDUCATION.

The Canton of Zurich may be taken as the representative of Switzerland, as Prussia^a is the representative of Germany. “This Canton” (says the Report of Her Majesty’s Commissioners, just quoted,) “shows its zeal for education by devoting nearly one-third of the whole public expenditure to that object, whilst there are also considerable endowments, and the parents pay fees besides. The system begins with the Communal School, which takes the child at six, and keeps him till he has completed his twelfth year. To this school every parent is compelled to send his children, under penalty of a fine, or to satisfy the school authorities that they are getting as good an education elsewhere. And even those who have their children educated elsewhere must still pay the school fee, just as if the children attended the school. As the schools are really good, few go elsewhere, and one finds all classes of society mixed in them. When a child has passed through the Communal School, the parent is still compelled to keep him under instruction for three years more, either in the Public Schools, or (as before) under equally good tuition. The Public Schools to which he may be sent, and among which the parent has the choice, are of five different kinds. The lowest is the Singing School (*Singschule*), which requires him to keep up his knowledge of church music and singing by one hour’s practice in the week, and to attend the religious instruction of the pastor of the parish for one hour and a half. Next above this stands the finishing school (*Ergänzungsschule*), which is, in fact, a higher department of the Communal School, with eight hours of instruction a week, the eight being generally taken in two mornings. The fee is in both these schools the same, three francs a year, which may be raised to six by the local school authority. Next ranks the higher popular school, or, as it is also called, the secondary school, corresponding to what we should call a school of the third grade. Here the studies are the same as those of the Communal Schools, only that each branch is carried further, and that French is added; the instruction extends over 28 hours a week. In each of these three kinds of school, the course lasts for three years, and at the end of that time, the scholar being fifteen, is no longer required to be under instruction. The fee in the secondary school is 24 francs a year, but the school is bound to take one scholar in eight as a free scholar. The two remaining schools are—the School of Industry, with a course of five years and a half, and the Gymnasium, with a course of six years and a half. Each has a lower and a higher division. The School of Industry corresponds with the Prussian *Realschule*, but it has no Latin at all. The subjects of instruction in the lower division are religious knowledge, the mother tongue, history, geography, natural philosophy, arithmetic and mathematics, free hand and geometrical drawing, singing, gymnastics, and military exercises. The course lasts three years. In the upper division, English and Italian are a part of the regular programme. But there is no longer one course obligatory on all; there are three distinct courses, the mechanical, the chemical, and that intended to prepare for business. The Education Council

"urges the masters not to let the school be turned into a place for mere professional study, but this organization gives a bias which it is hard to resist. The course lasts two years and a half. In the lower School of Industry the fee is 30 francs a year, in the higher 60. The Gymnasium is, in all important respects, formed on the same model as the Prussian, except that whereas in Prussia the common primary school is not regarded as the proper preparation for the Gymnasium; in Zurich it is, and the studies are so adjusted that a boy passes naturally from one to the other. The instruction of the Gymnasium is still, however, classical, and the passage to the University lies through it. But Greek is not generally obligatory, and the composition is reduced to a translation into Latin or Greek once a week, and this translation is little more than a grammatical exercise. On the contrary, composition in French is carried as far as the essay, and much beyond composition in the classical languages. The fee in the lower Gymnasium is 30 francs a year, in the higher 48. The Gymnasium leads to the University,—the School of Industry to the Polytechnicum. The University is like other German Universities. The Polytechnicum (which, though situated in Zurich, is a national, and not a cantonal, institution) is a high school for training civil engineers, for teaching the applied sciences, and for training teachers of technical instruction. The fees are low; the staff of professors excellent; some of the most distinguished scientific men in Germany have been brought there by the Swiss Government. The work done for education in the Canton of Zurich, out of its own revenues, is summed up by Mr. Arnold in one sentence: 'A territory, with the population of Leicestershire, maintains a university, a veterinary school, a school of agriculture, two great classical schools, two great *real* schools, a normal school, for training primary and secondary teachers, fifty-seven secondary schools, and three hundred and sixty-five primary schools; and many of these are among the best of their kind in Europe.'

SCHOOLS AND THE SCHOOL LAW IN ENGLAND.

The passage of the new School Law for England forms a memorable era in her history, and marks one of those great social strides which nations, under strong pressure, sometimes take.* In this matter England has shown how strongly conservative have been her national instincts. As already indicated, the first report on which her recent school legislation was based was prepared by the last of a series of most influential Commissions which were appointed by Her Majesty, at successive periods, to enquire into the state of education in the various parts of England, Scotland, Ireland, the various countries on the continent of Europe, the United States and this Province. The reports of these Commissions would fill from sixty to eighty ordinary octavo volumes. They embrace a mass of facts elicited by questions, letters and circulars and a variety of detailed information from every source, which have thrown a flood of light on the state of Public Education in different countries, and which have proved of immense service not only in the school legislation of England, but elsewhere.† For an analysis of the English Act of 1870 we are indebted to information contained in the last report of the United States Commissioner of Education. He says:

"A great advance has been made in the system of Public Education in England during

* NOTE.—One of the most potent arguments so effectively used by the promoters of a speedy enactment of the New School Act of England, (which embodies both the "Free School" and "Compulsory" Principles) is thus stated by the Rev. Canon Kingsley, who had he says himself, for many years advocated the opposite opinion (of non compulsion).

"All I ask is—not that those who have studied National Education—but the general public, should keep in mind this broad, ugly, dangerous, disgraceful fact: 'There are now *** about one million, three hundred and eighty thousand children in this Kingdom who ought to be attending some Elementary School or other, but who are not; 1,380,000 children growing up in ignorance in a country which calls itself civilized, but which will be called by a very different epithet some 200 years hence unless she mends her ways right speedily.'

The Revd. H. G. de Bunsen shows that out of 2,700,000 children in England which should attend the Elementary Schools, only 1,250,000 actually do so, leaving 1,450,000 or more than half the school population destitute of any kind of School Education!

† This is felt and acknowledged in the United States, and the publication of some valuable information in regard to education in Sweden and Norway, obtained through the United States legations, is urged in a letter to the Commissioner of Education at Washington as affording an opportunity of sending such a report to the English people in return for similar favours from them.

"the past year, one which gives promise that before long the proud boast of America—that education is offered as a free gift by the State to the child of every citizen—will also be that of the Mother country. The preliminary step was taken in 1869, when the Government took upon itself the supervision of the Endowed Schools of the kingdom. These Endowed Schools, many of them of great antiquity, were founded by benevolent people, generally for specific purposes. In many cases the value of the foundation has greatly increased, owing to the rise of real estate; and also abuses have sprung up, to correct which, and to render available for general educational purposes, so far as may be practicable, those moneys devoted to education, was the object of the Bill. A few of the larger Schools, such as Eton, Harrow, Rugby, which have been notably well managed, were excepted from the provisions of the law. With these express exceptions, it includes all Endowed Schools.

THE NEW SCHOOL LAW FOR ENGLAND.*

"The central authority rests in the Council of Education, and the whole of England is cut up into certain districts for School purposes, which are under the charge of Inspectors. For instance, Yorkshire has two Inspectors, who go to every Elementary School and report upon each to the Vice-President of the Council of Education. If there is any improvement to suggest, that is done; or, if a teacher should be removed, that is reported and acted upon. If children pass a certain examination an extra grant is made to the School. There are certain standards from one to seven inclusive, and the higher the standard which a class reaches, the greater the grant from the Educational Fund for that School. The payment is dependent upon the results, and the teacher is therefore earnest in pushing on his work. In regard to truancy, they will, whenever we get the law well in working order, alter that word 'may' to 'shall.' Within one year provision has to be made for the education of every child in England and Wales; and this, it is anticipated, will require that the present number of School-houses shall be doubled. The School Boards are authorized to provide funds for those additional buildings, by issuing bonds running for thirty years at 4 per cent. The discussion in Parliament which resulted in the present Act, was long and earnest, and the advance indicated by this Bill, which is confined in its action to England and Wales, will be fully appreciated only by those who followed the course of the debate, or were familiar with the previous state of Public Education in Great Britain. The question of compulsory attendance was very earnestly discussed, and was finally left to separate School Boards, who have a certain discretionary power of enforcing attendance; but the advocates of compulsion do not propose to be content until its ultimate adoption. The question of religious education in Schools was also very warmly debated, and resulted, as will be seen in the following summary of the Act, in making them wholly unsectarian. The *object* of the *Law* is to secure the establishment in every School district of Public Schools sufficient for the elementary instruction of all the children resident therein whose education is not otherwise provided for. School districts are either municipal boroughs, or parishes included in them. An Elementary School, in the meaning of the Act, is a School in which elementary instruction is the principal part of the education given, and in which the ordinary payments of each scholar do not exceed nine pence a week. In estimating the educational requirements of any district, one-sixth of the total population are to be counted as of school age.† These, less the number in Schools charging more than nine pence a week, are they for whom the Public Schools must provide. In calculating the accommodation afforded by existing Schools, eight square feet of flooring is to be allowed for each child.

* NOTE.—The first educational effort put forth in England was private. In 1808 the "British and Foreign School Society" was established. The Church of England "National Society" was formed in 1811; the "Home and Colonial School Society" followed in 1836; the "Wesleyan Education Committee" was formed in 1840; the "Congregational Board of Education" in 1842; the "London Ragged School Union" in 1844; the "Catholic Poor School Committee" in 1847; and the "Church Education Society" in 1853. The first move made by the Government in favour of education was in 1832. In 1839 and 1846 it further extended its operations, and has continued to do so until it has at last absorbed the whole work into its own hands.

† This is a very low estimate. In this Province the proportion is one-fourth. This is also the estimate elsewhere.

Definition of the Public School.—To be considered a Public School, every Elementary School must be conducted in accordance with the following regulations, a copy of which must be conspicuously posted in the School-room :—1. It shall not be required as a condition of any child being admitted into or continuing in the School, that he shall attend or abstain from attending any Sunday School or any place of religious worship, or that he shall attend any religious observance or any instruction in religious subjects in the School or elsewhere, from which observance or instruction he may be withdrawn by his parent, or that he shall, if withdrawn by his parent, attend the School on any day exclusively set apart for religious observance by the religious body to which his parent belongs. 2. The time or times during which any religious observance is practised, or instruction in religious subjects is given at any meeting of the School, shall be either at the beginning or at the end of each meeting, and shall be inserted in the time table to be approved by the Education Department, and to be kept prominently and conspicuously affixed in every School-room. And any scholar may be withdrawn by his parent from such observance or instruction without forfeiting any of the other benefits of the School. 3. The School shall be open at all times to the inspection of any of Her Majesty's Inspectors. So, however, that it shall be no part of the duties of such Inspectors to enquire into any instruction in religious subjects given in such School, or to examine any scholar therein in religious knowledge, or in any religious subject or book. 4. The School shall be conducted in accordance with the conditions required to be fulfilled by an Elementary School in order to obtain an annual Parliamentary grant. The word 'parent,' as used in these regulations, is defined as signifying any parent, guardian, or other person, having legal authority over the child.

School Accommodation.—Full returns of existing school accommodations, in each district are to be made by proper authorities (as hereinafter explained) to the Education Department, which will promptly decide whether any deficiency exists. In so doing, the department will take into consideration every school, whether a Public Elementary School or not, and whether actually situated in the school district or not, which in their opinion gives, or, when completed, will give, sufficient elementary education to, and is, or will be when completed, suitable for the children of the district. The Education Department will then publish their decisions, giving the number, size, and description of the Schools reported as available for the district, with the amount and description of the accommodations required. Any appeal against such decision must be made in writing to the Department within one month after its publication, either by rate-payers of the district (not less than ten in number, except when the smaller number represents at least one-third of the rateable value of the district) or by the managers of any Elementary School in the district. If such an appeal is made, the case must be settled by public enquiry. If no appeal is made, or if, after appeal, public enquiry has shown more accommodation to be necessary, final notice is to be issued by the Department, directing the required accommodation to be provided. If it is not supplied at the expiration of six months, or is not in the course of being supplied, a School Board must be formed to see that the work is done. If the School Board fail to comply with the requirement within twelve months, the Education Department must take the matter out of their hands and provide the needed school accommodations independent of the local authorities. School Boards may be formed without such preliminary enquiry or notice, where application is made to the Education Department by the persons who would elect the School Board, or where the Department are satisfied that the managers of any Elementary School in the district are unable or unwilling to maintain such school, and that its discontinuance would occasion a deficiency of accommodation.

Management of Schools.—Every School-board School must be a Public Elementary School as defined above, and no religious catechism or religious formula, distinctive of any particular denomination, shall be taught in the School. The School Board may delegate any of their powers except that of raising money. They may delegate the management of any School provided by them, with or without restrictions, to not less than three managers, and may remove such managers or alter the conditions as they may see fit. Any manager so appointed may resign on giving notice to the Board. Any School Board that fails to enforce the prescribed regulations will be con-

"sidered in default, and the Department will act accordingly. In any dispute the decision of the Department is to be final. The fees to be paid by children attending School-board Schools are to be fixed with the concurrence of the Department. The School Board may remit the fees of any child of poor parents for a renewable period of not less than six months, the remitted fees not to be deemed parochial relief. The School Boards must maintain the efficiency of School-board Schools, and provide additional accommodations when necessary. Schools can be discontinued, or their sites changed, only with the concurrence of the Department. If School Boards fail at any time to increase accommodations when needed, the Department must interfere. School Boards are further empowered to provide necessary apparatus, and to make compulsory purchase of School sites. The managers of any Elementary School may transfer their School to the district School Board with the consent of the Department together with that of two-thirds of the annual subscribers to the School. Objection to such an arrangement must be made within six months from the date of the transfer. When the School fees of any child of poor parentage are paid by the School Board, the parent has the right of selecting the School to which the child shall go. School Boards may establish free Schools, with the consent of the Department, and also contribute to, or establish Industrial Schools. All *School Expenses* are to be paid out of the School Fund, which fund is to be made up of fees, parliamentary grants, loans, and any other moneys received by the Board. Any deficiency in the School Fund is to be paid by the rating authorities out of the local rates. In united districts, the School Boards will apportion the amount required among the constituent districts in proportion to the rateable value of each, to be paid by the rating authorities on each. If these authorities fail to pay the required amount, or if the money is to be raised from any place which is part of a parish, the School Board may appoint officers to take the place of the rating authority of such place. School Boards are permitted to borrow money, with the consent of the Department, on the security of the School Fund, for the purpose of providing or enlarging their School-house.

"*Compulsory Attendance.*—School Boards may, with the approval of the Education Department, make by-laws requiring the attendance of all children between five and thirteen years of age, determining the time during which the children shall so attend (subject to the regulations above given), providing for the remission of the payment of the School fees of poor children, imposing penalties for the breach of the by-laws, and revoking or altering the by-laws. Children between ten and thirteen years of age may be exempted from such compulsory regulations upon certificate of proficiency from the School Inspectors; or on showing that they are otherwise sufficiently instructed, that they are sick or unavoidably prevented from attending; or that there is no Public Elementary School within the prescribed limit—three miles.

"*Parliamentary Grants.*—After March 31st, 1871, no parliamentary grant will be made to any Elementary School which is not a Public School as defined above. No application for building grants will be entertained after December 31st, 1870. After March 31st, 1871, no grant will be given in respect of any religious institution. No grant to any School in any year shall exceed the income of the School for that year from fees and voluntary contributions. Hereafter no School will be required to be connected with any religious denomination, or to give religious instruction as a condition of receiving aid from parliamentary grants. Voluntary Schools and School-board Schools are to be treated impartially. Additional parliamentary grants are to be made to exceptionally poor neighbourhoods. The annual grant may be refused to any School not previously in receipt of public aid if it is situated in a district having a School Board, and if in the judgment of the Education Department the School is not absolutely necessary."

THE SCOTCH SYSTEM OF EDUCATION.

Although it is proposed to introduce into Parliament at its next Session, a comprehensive School Law, (as in England) for Scotland, yet for the purposes of this Report, we quote the following passages from the report of Her Majesty's Commissioners, on the present system. They say:—

"The Scotch system appears to comprise three grades of institutions for education, "Parochial Schools, intended chiefly for primary instruction; the Burgh Schools or "Academies, for secondary instruction; and the Universities. The Parochial Schools, "which date from the Reformation, are closely connected with the Scotch Church, "so much so, that when the Free Church seceded from the Establishment, the "seceders proceeded to build new schools as well as new churches. The Schools are by "law under the control and supervision of the Presbyteries, though the buildings of each "school are maintained, and a minimum salary is paid to the master, by the heritors or "land-owners of the parish. The secondary schools are the Burgh Schools in the municipal "towns and the Academies. The Burgh Schools are maintained and controlled by the "municipal authorities, who appoint the masters, determine the subjects of instruction, "and fix the fees to be paid by the scholars. It is not easy to draw the line between "these schools and the Academies. Several Burgh Schools appear, after falling into disrepute, to have been revived and remodelled, and then called by this name. As a rule, "however, it seems that an Academy either has, or has at one time had, the support of a "body of subscribers, and is therefore in some degree a proprietary as well as a municipal "school. In these cases, as long as the subscribers have continued their support, they "have retained a share in the control. Some Academies, as for instance, that of "Edinburgh, are simply proprietary schools. Lastly, above the Burgh Schools and Academies stand the four Universities. The peculiarity of the relation between these various "institutions consists in this, that they compete with and overlap each other. The Parochial Schools often give what is really secondary instruction; the Burgh Schools and "Academies often give primary; and the Universities largely compete with the Burgh "Schools and Academies, and admit many to the professors' lectures, who would more "naturally be still at school. Each institution in fact takes its own independent line "without regard to the others." The Commissioners then proceed to describe each class of schools, and sum up with the following reference to the keen interest felt by Scotch parents in the education of their children: "Outside the schools there is a force at work, which "really supplies them with all their life and vigour, and this is the extraordinary interest "which the parents take in the progress of their boys. All the energy and all the interest "of the Scotch teacher would perhaps not produce more result than that which English "country Grammar Schools afford, were they not seconded by the anxious and intelligent "watchfulness of parents and patrons, and by the consequent eagerness and diligence of "children. 'What place in the class to-day?' is generally found to be the first question "asked when a boy went home after school; then would follow questions as to what he "had read; whether such and such neighbour's son was above or below him; and if above "him, why so; and whether if he worked a little harder, he could not manage to take him "down; how he had gained or why he had lost a place; who was *dux*; and did he think "he had a chance of ever being *dux*, and so on; every word shewing the keen interest the "parent feels in the son's progress, and the importance which the whole family attach to "his success. In short, the schools are practically in the hands of the parents; the parents "use the masters to educate their sons, but they themselves direct the education. The "responsibility, the expense, the guidance are all their own, and the result is that they "give their hearts to a task which in many respects none others can do so well."

THE IRISH SYSTEM OF EDUCATION.

The main features of the Irish National System of Education are so well known, that it is not necessary to refer to them in detail. In 1870, the number of children on the rolls of the 6,800 National Schools was nearly *one million*, (998,999), while the average attendance was only 359,199, or a little more than one third! The Government expenditure for the year was £431,265. £60,528 additional were paid from local sources for the salaries of teachers.

COMPARISON OF THE DIFFERENT EUROPEAN SYSTEMS.

In their report, Her Majesty's Commissioners thus institute a comparison between the different Systems of Education quoted and their own, as follows:—

"The French, the Prussian and the Swiss systems owe the completeness of their success to the perfection of their machinery. There is no waste of power. The aim of the teacher is clear and distinct; the scholars know perfectly what to expect; the work is tested at every proper point; the higher education is not interfered with by the demands of the lower, as is perhaps the case in some degree in America; nor is the lower interfered with by the demands of the higher, as is certainly the case in England. The Scotch system does much, but it is impossible to put it by the side of the Prussian, or still more the Swiss, which it perhaps resembles in its general aim, without seeing how much it would gain by a co-ordination of the Schools with each other and with the Universities, and by a regular system of examinations. But even if Scotland and America can enforce success without much organization, simply because the problem of education in both countries is comparatively simple; it is impossible to expect the same result in a country like England, with so complex a society, with such a vast variety of needs, with old traditions of teaching already in existence, and of necessity exercising a powerful influence on all educational institutions new or old. The Schools are drawn in different directions by the demands of the Universities, by demands of the parents, by public opinion, by antiquated regulations; and since much of this medley cannot be destroyed, there is no remedy left but to reorganize it in such a way as to put what we have to the best use, and make room for more by the side of it."

AMERICAN SYSTEMS OF EDUCATION.

The general principles on which the systems of Schools in the several American States are founded are known to the public. The details vary in each State, and we shall, therefore, only refer to them in illustration of the modifications recently made in our own law, where necessary. Within the last few years the United States Government has established a Bureau of Education at Washington, with a view to collect yearly information in regard to Education in the various States, and to stimulate Public Education, and to assimilate the School Laws throughout the Union. Since the war, the fixed policy of the American Government has been to make the entire Republic a homogeneous whole educationally, politically and socially.

NECESSITY FOR THE RECENT CHANGES IN THE SCHOOL LAW OF ONTARIO.

We will now proceed, in the light of the educational facts and illustrations which we have given from other countries, to discuss the recent improvements which have been effected in our own law.

In round numbers the population of this Province may be set down as nearing 2,000,000. The number of children of school age is 483,966, or about one-fourth of the whole. The number of Elementary Schools is not much below 5,000, and are maintained at an annual cost of nearly \$2,000,000, or one dollar per head of the population. Such being the magnitude to which our Educational System has grown, every man will feel how imperative it is upon us to see that that system is as thorough and complete in all of its details as possible; and that in no respect should it be allowed to fall below the standard now reached by the other educating countries to which we have referred.

So long as our system of Schools was in its infancy, and might be fairly regarded as yet an experiment, so long might we confine our efforts to mere elementary organization and be content with very moderate results. Experience has shown, however, that without great care and constant effort the tendency of all systems of education, and ours among the rest, is to a state of equilibrium, or to a uniform dead level of passable respectability. This is the stage in its history, as elsewhere, at which our system has arrived, and at which, as we have explained, many of its friends are disposed to leave it. But those who have carefully studied the subject in all its bearings, and have looked more closely into the educational history, the progress and failures of other countries, know full well that our School System would fall behind that of other countries and become stationary, unless it embodies within itself from time to time the true elements of progress, and provides fully and on a sufficient scale for the educational wants of the youth of the country.

These wants, as indicated elsewhere, involved provision being made, at this stage of our educational history for the following among other matters, viz.:—

- I. The establishment of a National System of Free Schools.
- II. Declaring the necessity for, as well as the right by law of, every child to attend School, thus recognizing the principle of "Compulsory Education."
- III. The fixing of a higher standard of qualification for Teachers.
- IV. Giving the profession of teaching a fixed legal status, and providing for the retirement and support by it of its worn-out members.
- V. Prescribing a more systematical and comprehensive, yet practical, course of study for each class of pupils in our Schools,—including the introduction of the new subjects of Agriculture, Commercial Instruction, Mechanics, Drawing, Vocal Music and Natural History into the course of study for the Schools.
- VI. Requiring that adequate School accommodation be provided by Trustees for all the children of school age in their localities.
- VII. Giving facilities for the establishment of Township Boards of Education.
- VIII. Authorizing the establishment of Industrial Schools.
- IX. Discriminating, by a clearly defined line in the course of study, between the Public and High Schools; and prescribing a programme of studies for High Schools.
- X. Providing for the establishment of Collegiate Institutes or Local Colleges.
- XI. Declaring the duty of Municipalities to maintain High Schools equally with Public Schools, as part of the system.
- XII. New principle of "Payments by results" to High Schools.
- XIII. Providing for a more thorough and systematic inspection of Public and High Schools—thus recognizing the necessity for a more complete supervision of the entire system, and a harmony in its several parts.
- XIV. Miscellaneous Provisions: Pecuniary and Personal Responsibility of Trustees—Powers of Arbitrators—Appeals—Vacations, etc.

THE RECENT IMPORTANT CHANGES IN THE SCHOOL LAW OF ONTARIO.

Before entering into the immediate discussion of these improvements in our law, we quote, as a preliminary, the following striking remarks of the Rev. Charles Kingsley, (President of the Education Section of the Social Science Congress of England, in 1869,) on the inherent right of every child to education, and the duty of the parent and of the State in giving facilities for the enjoyment of that right.

As to the right of the child, and the duty of the parent, Mr. Kingsley says:—

"Let me tell you in a few words what principles I believe should never be lost sight of by those who wish to educate the nation. I hold, that whatever natural rights a human being brings into the world with him at his birth, one right he indubitably brings: namely—the *right of education*; that is, to have his faculties and capabilities educed—brought out; at least so far that he can see for himself something of what there is to be learned, and what there is to be done, in the world in which he must needs live; and what of that he himself can learn and can do. I say he has a right to this. He was put into the world by no act of his own; and he has a right to ask of those who brought him into the world, that he shall be taught how to live in it. Of course it follows that he has a right to demand education first from his own parents. They are responsible for him, not merely to the State, or to God; they are responsible for him to himself. But if his parents will not, or cannot give him education—and that too many will not, who does not know?—if parents, I say, will not, or cannot, educate, of whom is the child to demand his natural right? I answer: *From the State*; and if the child (as is the case) is unaware of its own right, and unable to demand it, it is the duty of all good citizens to demand it for him."

Further on, in discussing the duty of the State, Mr. Kingsley declares that:—

"The State has no right to compel the mass of citizens to receive among them every year a fresh crop of savages, to be a nuisance and a danger to the body politic. It has no right to demand that the physical life of the child shall be preserved, and yet to allow its far more important and valuable life—its intellectual and moral life—to be destroyed. Moreover, it has no right to delegate its own duties in the matter to any voluntary asso-

"ciation, however venerable, earnest, able. The State, and the State alone, is responsible to the existing citizens for the training of those who are to become citizens. It alone ought to do the work ; and it alone can."

I.—THE SYSTEM OF FREE SCHOOLS.

Since 1850 it was left to the ratepayers in each school division to decide annually whether the Schools should be free, or partly supported by rate-bill on pupils attending the school. The principle, that a Public School education is the right of every child in the land, and that every man should contribute, according to his property, to the education of every child in the community, by whose influence and labours such property is protected and rendered valuable, had greatly obtained, so that Free Schools had increased from one hundred to five hundred per annum, until upwards of four thousand of the four thousand four hundred Public Schools were made free by actual experiments, and by the annual discussions and votes in these primary meetings of the people. The demand was very general for several years, that all the Public Schools should now be made free by law, and all local disputes on the subject be thus terminated. This has now been happily accomplished by the new law.

FREE SCHOOLS IN VARIOUS COUNTRIES.—EXAMPLES, ARGUMENTS AND ILLUSTRATIONS.

A system of Free Schools now exists in the States of Massachusetts, Connecticut, New York, New Jersey, Michigan, Alabama, Missouri, Virginia, West Virginia, Indiana and Illinois. In this latter State, with a school population about double that of ours, the expenditure for Public Schools in 1868, was nearly seven millions of dollars (\$6,896,879)—a sum more than three times that of our expenditure for Public Schools. The Free School tax alone amounted to \$4,748,105, or nearly five millions of dollars, while (with a school population less than one-half that of Illinois) our entire expenditure for Public Schools, in 1870, was only \$1,712,060, or less than two millions of dollars. This noble example of Illinois is truly stated in the report to be "without a parallel in the whole history of Free Schools on this continent." In regard to the various States of the South, the United States Commissioner of Education in his report for 1870, says:—"It is gratifying to know that under the restoration policy of Congress the reorganized State Governments have adopted constitutions making obligatory the establishment and conduct of free public schools for all the children of school age." In Kentucky, a large majority of the people cast their votes in favour of Free Schools, but the legislature refused to concur with them. In Queensland, (Australia), a system of Free Schools has been lately established ; and in England County Boards are authorized to establish them.

In a recent report of the Board of General Education in Queensland (Australia), the Board thus refers to the operations of the free school law introduced into that country in 1869:—"We believe that, on the whole, the effect of the change has been decidedly beneficial ; * * * but the balance between the good and the evil is certainly on the right side. Among the conspicuously beneficial consequences of the change, the large increase in the number of children brought within school influence naturally ranks first. The rolls for 1870 included the names of 16,227 children, whereas the return for 1869 showed only 11,087"—an increase of attendance, it will be seen, of nearly fifty per cent. in one year!

In summing up the result of his educational experience in England, Mr. Kingsley thus discusses the application of the new principle of Free Schools. He remarks:—

"I question, from twenty-seven years' experience, whether it is really better to make the labouring class pay School pence (as fees) for the education of their children ; whether the wisest method is not to make them pay School rates, as they do poor rates, and open the Schools free. My experience is, that as long as they pay, both the ignorant, the stupid and the unwilling (and it is with them we have to deal in this matter) will persist in considering schooling as an article which they may buy or not, as they see fit, like beer, or fine clothes, or any luxury ; and they will persist in thinking, or pretending to think, that they are doing the School managers a favour, and putting money into their 'pockets' ; that they will persist in thinking, or pretending to think, that they pay for the

"whole of their children's education, and ignore the fact that three-fourths of the expense is borne by others, and that the only method to make them understand that educating their children is an indefeasible duty, which as citizens they owe to the State itself, is for them to be taxed by the State itself, and for the State to say—there is your money's worth in the School. We ask no more of you ; *but your children shall go to School, or you shall be punished by the law.*"

The State Superintendent of Public Instruction for Virginia thus forcibly states the following historical facts and arguments in favour of Free Schools :—

"The undeniable fact of the steady growth of the Public Free School System among the civilized nations for the last century creates a presumption in its favour. It flourishes under various forms of government, *and when once tried is never abandoned*, but, on the contrary, is cherished and perfected more and more. It is observed also that its popularity (in the United States) is not chiefly among the ignorant and moneyless, but among the more intelligent property holders, and often among those who have the largest taxes to pay. This popularity is not to be accounted for by the growth of the republican form of government, for the system existed on this continent a hundred years before there was a republic, and at this time it is flourishing among the monarchies of Europe. And would it be seen existing in a perfection unknown on this continent, and vitalizing the energies of a mighty, consolidated empire, behold the kingdom of Prussia ! As a mere matter of fact, the Public Free School System is as clearly established as an element in the world's progress as any other of the great developments of modern enterprise.

"Those who have studied the history of pauperism in Southern Europe and in England, tell us that the bulk of it comes from the neglected freedmen of the Roman empire and of the feudal barons. Now behold the result in the lazzaroni of the Mediterranean States and in the cloud of paupers in England ! In the latter the education of the ruling classes has given national prosperity, but in England every tenth man is a pauper ; and whilst she spends but little for the education of the common people on the free system, she is (or was not long ago) compelled to spend thirty millions a year for the subsistence of her paupers, and a great deal more to punish them for their crimes. The statistics of her prisons show that 95 per cent. of crime is committed by persons unable to read or write, and also that not one criminal in two hundred has what may be called an education. And such is the testimony of prisons everywhere as to the intimate relations between ignorance, pauperism and crime.

"When, on the other hand, we turn to those European nations which have established Public Free Schools, there is a far better state of things in these particulars. Such is the case in Norway, Sweden, Denmark, Holland, Belgium, and most of the German States. There they have Common Schools, and there pauperism is almost unknown ; and the testimonies go to show that in proportion as the people are educated, they are free from crime and improved in thrift and good morals. Similar results are claimed in those States of our own prosperous and powerful country where the system has been thoroughly tried, and claimed with the greatest confidence in those States where the system has been longest tried. The outlay is great, but the income is far greater. No-thing is so costly as crime and ignorant, thriftless labour. Nothing makes public order so difficult, reputation so insecure, property so precarious, government in every department so costly and unstable, as ignorance and vice. Now for these evils there is within the power of Government no remedy so cheap and effectual as Common Schools, which bring men from darkness into the light. And in these times, when every place and privilege belong to every man, there is no estimating the stake we have in this matter. Universal suffrage simply necessitates universal education."

The Secretary of the Board of Education for the State of Connecticut, thus expresses the feeling and experience of that State on the subject :—

"Free Schools no longer need any defence. Experience has tested them. Opposition and discussion have helped them. * * * The press of Connecticut, with possibly a single exception, is now a unit in behalf of Free Schools. The cause of education was never so heartily endorsed by the masses. The results of the Free System demonstrate its wisdom and necessity. The common people favour it, and already reap

"a rich harvest from it. The proof now before the public that over 10,000 children were barred from School by the Rate Bill, buries it beyond the possibility of resurrection. The disasters dire so confidently predicted, unless diminished attendance on Private Schools be such, do not appear. No measure so radical, touching so many persons and pockets, was ever more generally ratified by the people. Michigan quoted our arguments and followed our example in 1869; and during the last month, New Jersey adopted a most liberal Free School Law, and thus the only vestige of the Rate Bill left in this broad land was abolished. The Free School system may now be truly called the American system—the only State system in this country. It will stand so, for no State that has tried both systems ever went back to the Rate Bill."

As to the principles and conditions of the Free School system, the Commissioner of Public Instruction in Rhode Island declares that:

"A system of Free Schools, to be universally popular, must be universally practical, so much so that the dullest comprehension may see something of intrinsic value in it. It becomes every intelligent citizen and legislator, therefore, to inquire to what extent the operations of the system meet the wants of the people, and wherein it fails to secure the desired end. * * * A perfect system may become a perfect failure, if it does not feel the vital forces pervading it which spring from the popular will. An imperfect system may be made to do wonders, if its defects are supplemented by an intelligent and enthusiastic body of workers, supporting and advancing its interests. To secure the hearty co-operation from the whole people, the working plan must touch and vitalize every interest, and in its broad and liberal provisions it must meet the present and anticipate the prospective wants of every child and man in society. A noted king and philosopher of ancient times, when asked, 'What kind of education should be given to boys?' answered: 'That kind of knowledge they will need to use when they become men.'"

II.—COMPULSORY ATTENDANCE AT SCHOOL.*

The provision of the law in this matter is the legitimate consequence of the principle involved in the establishment of Free Schools; for if every man is to be taxed, according to his property, for the Public School education of every child in the land, every taxpayer has a right to claim that every child shall be educated in the various branches of a good English education; otherwise it is raising money by taxation under false pretences.

And, if every man is to be taxed according to his property for the education of every child, and if every child has a right to school instruction, some provision was needful to secure both the ratepayer and the child against the oppression and wrong which might be inflicted by an unnatural guardian or parent. Society at large, no less than the parties immediately concerned, requires this protection; and the protecting provision of the law, in this respect is milder and more guarded than a corresponding one in Prussia, Massachusetts, and other countries† where Public School education is provided for and guaranteed to every child in the country. According to the new Act, no parent or guardian is liable to punishment whose wrong against society and his youthful charge is not wilful and criminal. If such a protection in this mild and guarded form is found, on trial, to be insufficient for the purposes intended, a more stringent one can be enacted by the Legislature hereafter. But, I believe the law will, upon the whole, secure the end proposed.

ORIGIN OF THE COMPULSORY SYSTEM IN GERMANY AND SCOTLAND.—EXAMPLES.

1. The Rev. H. G. de Bunsen, in an address at a recent Social Science Congress, on

* By telegram, dated Paris, Nov. 7th, we learn the Council-General of the department of the Seine has voted in favour of the establishment of a system of compulsory and gratuitous education. The local rulers of Paris, evidently impressed with the great need of some salutary and effective measures for redeeming the ignorant masses (from which the conscripts are taken) from their degradation, have, like Austria, in her humiliation, taken a leaf out of their conquerors' book, and have acted boldly and promptly in this matter. The effect will be salutary throughout France. Compulsory education has also been ordered in the new provinces of Alsace and Lorraine, by the German government. This may have prompted the Parisians to action.

† The compulsory system has, within the last and present years, been adopted in Michigan, Texas, and other of the American States.

the *Education of Neglected Children*, after showing that out of 2,700,000 children in England that should attend the Public Elementary Schools, nearly one million and a half (1,450,000) do not do so, declares that :—

“There does not appear to be any other mode of arresting the fatal progress of this great evil, and of attempting to educate all classes of children, than by making education compulsory in Great Britain—that is, compulsory on the parents, and compulsory on the employers of children; in other words, the State must enforce by legal enactments the attendance of children at school. But, let me observe, there are two kinds of compulsion, the one direct, the other indirect. The one, the direct kind of compulsory education, is the law in Prussia, in North and South Germany, in several of the American States, and in several of the Cantons of Switzerland. But this kind of legal compulsion dates from the very beginning of Protestantism in some of the above-named countries, and in the rest it is coeval with their existence as independent free States. And, first, with regard to Prussia and Protestant Germany, it was Luther, (who, no doubt, in accordance with the precept of the Apostle Peter, when he says, in his first Epistle, iii., 15 : ‘Be ready always to give an answer to every one that asketh you a reason for the hope that is in you, with meekness and fear;’)—insisted, in his address to the municipal corporations of Germany, in 1524, on the duty—the religious duty—of seeing that each Protestant child be taught to ‘understand and practise the doctrine and duties of its religion.’ Ever since it has been recognized in Germany, whether enforced by enactment or no, as the ‘business of the Church to see its youth did so.’ This duty, universally adopted by all the Protestant princes of Germany, among others by the Princes Hohenzollern (or reigning House) in Prussia, was gradually extended in such a manner, that ‘compulsory education,’ comprising, in addition to the knowledge of the Scriptures, and the peculiar tenets of the two denominations of religion, Protestant and Roman Catholic, reading, writing, arithmetic, and history, had become universal in Prussia by the end of the last century. And since peace was again restored to Europe, and more especially to poor suffering Prussia and the North of Germany, by the battle of Waterloo; this compulsory education has been regularly enforced in all parts of Germany, more or less, by legal enactment. It has now become so entirely one with the national feeling, that, were the law to be abrogated at this moment, the nation itself, it is generally believed, would uphold it of its own free will.”

2. The Rev. Mr. Pattison, in his report to the English Commissioners says, in regard to compulsory education in Prussia :—

“The compulsion consists practically of a small fine, and the highest testimony that could be borne to the wisdom and efficiency of the law may be found in the statement which is sometimes quoted as an argument against it, viz. :—That ‘the school has taken so deep a root in the social habits of the general people, that were the law repealed to-morrow no one doubts that the schools would continue as full as they are now.’ Ninety-eight per cent. of the population of Prussia are stated to be able to read and write. Education is also compulsory in Denmark, where attendance at school is enforced from the age of seven to that of fourteen, and instruction is given gratuitously to children whose parents cannot afford to pay for their teaching. In Bavaria attendance at the Elementary Schools is compulsory for all children until the age of fourteen. In Saxony attendance at school, or instruction under properly qualified teachers, has been compulsory since the year 1835. Public education is said to have reached the highest point in Saxony—every child, without exception, partaking of its benefits. In Baden education is compulsory, and parents are compelled, by strictly enforced penalties, to send their children to school. In Portugal, by a law enacted in 1844, it is compulsory on parents to send their children to a place of public instruction, but this law, it is said, is not strictly enforced. In most of the Cantons in Switzerland, parents are compelled to send their children to school, or to have them privately taught, from the age of five to that of eight years. Neglect of parents in this respect is punished, in some cases by fine and in other cases by imprisonment.”

3. Dr. Lyon Playfair, in referring to the history of “Compulsory” Education, says :
“The first direct compulsory law relating to education in this kingdom, that I have

“met with in my studies, was passed by James IV., of Scotland, in 1494. He ordained that all sons of freeholders and barons should go to School under penalty, and that their eldest sons, who were to have the estates, should, after their preliminary education, attend three years at a School of Law, in order that they might administer, discreetly and wisely, Justices’ justice to the poor folk of the realm. It is a pity this compulsory law does not still exist for eldest sons! You see in it the idea that education should be adapted to the work of life. This main idea of fitting a man for his work was vigorously supported by our old reformers. John Knox held firmly by it, especially in his scheme for secondary education, which, unfortunately for Scotland, was never adopted, though his plan for primary education was. In the former he announced that no boys should leave School till they had devoted a proper time to “that study which they intend chiefly to pursue for the profit of the commonwealth.” This is the old conception of the object of education, and reappears at the present day under the modern garb of “Technical Education.” All the reformers urged its necessity, especially Luther and Melancthon. Most European States have held fast to the idea with more or less of development, but it has vanished utterly from our English Schools. Göethe brings out the idea finely in the travels of Wilhelm Meister in the pedagogic province, where he left his boy for education. Every boy in that Province was especially trained according to his aptitudes, in whatever direction these manifested themselves. Wilhelm Meister, after a twelve months’ absence, revisits the Province. He comes upon a cloud of dust produced by a troop of wild horses under a course of training by mounted boys. One of these was his son, for horse-breaking was made his main education, as he was found most fitted for it. Only to soften his mind under such a system, he was also carefully instructed in Italian literature. So it was with all the boys in this educational province. Some were masons or carpenters, some artists or musicians, all being treated according to their main aptitudes, though each had a collateral study to supplement the mental deficiency which experience showed to arise in such a course of training. Every pupil in the pedagogic province learned reverence (Ehrpercht), and that of three kinds—reverence for that above him, reverence for that around him, and reverence for that beneath him. In this quaint allegory of the pedagogic province, you will find the secret of the prosperity of Prussia, a State at the back of Europe, and which only got its civilization long after the Christian communities of Europe had organized themselves.”

ENGLISH ADVOCATES OF COMPULSORY EDUCATION—ITS NECESSITY.—EXAMPLES.

The Rev. Canon Kingsley, in an address before a recent Social Science Congress in England, thus eloquently answers the question: “*Ought Primary Education to be Compulsory or Voluntary?*” He replies:—

“We shall hear, I trust, much said about the relative merits of the voluntary and the compulsory systems in education. We cannot hear too much on both sides. Shall we have compulsory education or not?—is, to my mind, the first question of the day. * * * The State, I hold, has a right to compel the ignorant to learn; but it has also the right to compel the stingy to pay toward that learning. When, therefore, the National Education League was started at Binnington, I, for one, joined it, as the only method of obtaining what twenty-seven years’ experience as a parish clergyman had shown me to be necessary—*compulsory attendance*. No one is more alive than I am to the services which different denominations and religious bodies have rendered to education; to the services of the British and Foreign School Society; of the National Society, and especially of that venerable body, always foremost in all benevolent works, the Society of Friends. He who does not feel that England owes a huge debt to these splendid results of what is called the ‘voluntary principle’ (in giving), must be deeply ignorant of her history for the last eighty years. But, over and above what these good people have done, does not much, too much, remain *which they cannot do?* for the simple reason that those who need education most care for it least; and that those who are unawakened to the value of religion are certain to be still less awakened to the value of learning? Striking example of failure in the English ‘voluntary’ (as distinguished from the ‘compulsory’) system of education. This defect seems to me to be inseparable

“from the voluntary (as distinguished from the compulsory) system of education, how-
 “ever zealously and ably carried out. * * * Even if, as is usually the case, the
 “great majority avail themselves of the Schools rationally and thankfully enough, yet
 “there is always a minority who cannot be made to attend regularly without threats, fines,
 “exclusion from charities, and so forth. * * * And some who do not come to
 “School at all; children not generally of the very poor and miserable, but mostly of able-
 “bodied, reckless, profligate persons who are perfectly able to pay for their children's
 “schooling a sum probably double of what would be charged: but who prefer exercising
 “the indefeasible rights of free born Britons in spending their money in beer and fine
 “clothes. * * * How any voluntary system is to touch these free born Britons I
 “have not yet discovered. * * * So much for the agricultural districts. In the
 “towns the broad fact is, that in every large town there are children to be counted by
 “hundreds, often by thousands, who go to no school at all, and who cannot by any exist-
 “ing methods, be got to school. Let me, to give an example, call your attention to the
 “case of one town, Birmingham. There is no reason to suppose that the denominational
 “system has not been worked as earnestly and ably in Birmingham as elsewhere. * * *
 “But it was found last year (1868) that 21,000 children out of 45,000 (or nearly half the
 “children in Birmingham), were growing up in ignorance and idleness, * * * although
 “it was found that there was school accommodation already for more than 31,000 children.
 “* * * The Birmingham Education Society, finding that many of these children
 “were kept from school simply by the poverty of their parents, devised Free School
 “orders, by which these children would be admitted gratuitously to various schools of
 “all denominations; and succeeded thereby in getting some 5,000 out of the 21,000 to
 “school for awhile. But the voluntary subscriptions, even in so rich a town as Birmingham,
 “were so insufficient that they had, after a few months, to cease paying for 25 per cent.
 “of the poor children attending the day schools; thus throwing, to their extreme regret,
 “large numbers of these unfortunate children on the streets. No wonder, after so patent
 “and terrible a failure of the voluntary system, if the society went a step further, and
 “organised—as the only hope—a National Education League, the main objects of which
 “are (as chiefly embodied in the new law):—*To compel local authorities to find schooling for
 “every child in England and Wales; to pay for such schooling out of local rates; to provide
 “that the schools so prepared for, shall be unsectarian and free, without payment; and lastly,
 “to compel by law the attendance of children not otherwise educated.*”

2. Another striking instance of the powerlessness of voluntary charity to match itself with a want, almost national in its magnitude, is thus illustrated by Dr. Pankhurst, in certain remarks which he made at the Social Science Congress of 1869. He also illustrates another fact, that provision by the nation for certain charitable and worthy objects does not in any way dry up the sources or springs of individual efforts and benevolence. He says:

“The presence in England of a million and a quarter of young people who, in spite
 “of the statesmanship, philanthropy, and Christianity of the land, grow up uneducated,
 “become a misery to themselves and a danger and cost to the community, renders it per-
 “fectly clear, and has made it to be admitted upon all hands that education is a thing of
 “universal interest. The great principle of National Education rests upon that. Now,
 “if education is of universal interest, two consequences follow: first, it must be of univer-
 “sal provision; secondly, of universal diffusion. It is at the point of diffusion that the
 “question of compulsion comes in; and there is one great principle set forth in English
 “history which in my opinion answers all arguments addressed to the question of compul-
 “sion. About the time of Queen Elizabeth, we had to do for a great branch of human
 “necessity, what we are now going to do with the question of education. We had to
 “transfer the work of giving food and clothing to our destitute poor, from the office of
 “charity to the office of law. On what principle was that done? Simply this, you cannot
 “have law working efficiently in the community, unless it rests upon a moral basis. If it
 “had not been that the poor were fed and clothed by the good will and charity of mankind
 “up to that time, it would have been a perfectly idle thing to pass a law to compel man to
 “do it, because it would be, as it were, manufacturing a conviction about the matter; but
 “when charity and benevolence had reached a certain point, then it was possible to compel

“that to be done over the whole kingdom, which was being constantly done by a very large portion of it. What was the result? Did charitable work die out of the land? Did men cease to do good things for the destitute poor? No, they allowed the law to give the absolute necessities of food and clothing for the whole kingdom, and then charity and good will, being relieved from that irksome task, were able to engage in higher work which the law could not reach.”

3. Dr. Playfair thus argues the logical necessity for compulsory education :—

“An improved quality of education is a necessity for its enforced reception by the people. The principle of compulsion, timidly and hesitatingly put forth in the recent English Education Act is nevertheless contained in it. The logic of circumstances drove Parliament into the recognition of compulsion; and the same logic will oblige the Legislature to make it efficient. Let us look at the facts which compelled the recognition of the principle. The right of suffrage has for its corollary the duty of instruction. You cannot give political power to a people and allow them to remain ignorant. That would be a political suicide of a nation. An uneducated people are like a nation one or two generations back in its history. They cannot grasp the ideas of the age in which they live, and are powerless to shake themselves free from the prejudices which the progress of thought has proved to be dangerous errors. They are unable to do so, as they cannot take possession of the inheritance of the intellectual wealth accumulated by their predecessors; for they do not know how to read the books forming the testament by which it was bequeathed. An uneducated people, endowed with political power, is therefore, an anomaly, in the highest degree dangerous to a nation. Hence, when we bestowed on the people the right of suffrage it became necessary that they should have efficient instruction as its corollary. Secondly, we have now established what every civilized nation except England has long had—education by local rates. A civic support of education has again for its corollary enforced instruction of the individual citizen. For if it be right that the State should compel a community to educate all its citizens, it must be right to give power to that community to extend the education to every citizen.” He says further that :

COMPULSORY EDUCATION INVOLVES AN IMPROVEMENT IN ITS QUALITY AND AMOUNT.

“But you cannot enforce education unless you make it of a quality which you are certain will be useful to the person receiving it. Compulsory education, then involves an improvement in its amount and quality. Compulsion is of two kinds, direct and indirect. By the direct method every parent is bound to keep his children at school or be punished for the neglect. The indirect compulsion means that education shall be made the first tool with which labour can be begun, and, if that tool be not in the possession of the candidate for employment, the employer must not engage him. The indirect plan has the high authority of Adam Smith in its favour, but, it is unnecessary to indicate a preference between the two methods, for both may be good and necessary. In the Act of last Session only the direct system is recognized, though the others form the basis of our Factory Acts. Direct compulsion is most easily applied when it is least required, that is, when public feeling is entirely in its favour, and denounces the parent who neglects the education of his child as much a brute as if he starved it by refusing bread. But in England you have about half a million of these brutes to deal with, and their commonness prevents an adequate public censure of the magnitude of their crime against society.”

The Commissioners appointed in Victoria, (Australia,) to report upon the “operation of the system of Public Education in that country,” speaking of compulsory education, say, in the report of 1868 :—

“Whilst fully admitting the divided state of opinion in reference to this subject, as well as the serious, practical difficulties that beset it, we have resolved to submit the recommendation that a law rendering instruction imperative, should be adopted in Victoria. The existence in constitutional theory, at all events, of an equality of political rights between all classes of Her Majesty's subjects in this colony, suggests the paramount importance of early provision being made, by means more effectual than any that have hitherto existed, for the diffusion of sound instruction amongst the rising generation of all classes.”

AMERICAN ADVOCATES OF COMPULSORY EDUCATION.—ILLUSTRATIONS.

1. In Massachusetts the law at present prescribes compulsory attendance at School for every child between the ages of eight and fourteen for three months in the year. The Board of Education for the State have recommended to the Legislature that in future the compulsory attendance shall be for *six*, instead of three months in the year. The Superintendent of Public Instruction in the State of Maine thus summarizes the arguments in favour of compulsory education :—

“The power which compels the citizen to pay his annual tax for the support of Schools, should, in like manner, fill the Schools with all of those for whose benefit that contribution was made. It is in the light of a solemn compact between the citizen and the State community. The private citizen contributes of his means, under the established rule of the State, for the education of the youth, with a view to protection of person and security to property; the State, compelling such contributions, is under reciprocal obligations to provide and secure the complete education for which the contribution has been made. This implies the exercise of State power, and involves compulsory attendance as a duty to the tax-payer. The State builds prisons and penitentiaries for the protection of society, and taxes society for the same. But does she stop here, leaving him who has violated law to be pursued by the community in a mass, to be apprehended by a crowd, and borne by a throng to the place of incarceration? No!—she pursues the criminal through legitimate instrumentalities, ferrets him out by the sharpest means of detection, and eventually secures that safety and protection to society for which society has been taxed. Now, to prevent crime, to anticipate and shut it off by proper compulsory efforts in the School-room, working with and moulding early childhood and youth to the ‘principles of morality and justice, and a sacred regard for truth, love of country, humanity, and a universal benevolence, sobriety, industry and frugality, chastity, moderation and temperance, and all other virtues which are the ‘ornaments of society,’ the State not only has the right to inaugurate such methods as may be deemed best, but is under strict obligations to do so by all the means in her power.”

2. The Commissioner of Schools in Rhode Island, in deploring the fact that 10,000 children in that small State do not attend school, “but are learning the vices and corruption which idleness, neglect and profligacy most surely gender, and, under the influence of bad associates, and adepts in crime, are candidates for the Reform School and the prison,” asks :—“Can the State afford the loss of so many of its children from its schools of learning to be educated in *schools of crime*? Can it take the responsibility even of allowing one-fifth of its youthful population to grow up in a condition which will endanger its civil rights, as well as material prosperity and its social and moral character? The public sentiment of the people asks protection from midnight plunder, arson and murder. Crime and ignorance masked by day go hand in hand by night to perform deeds of wickedness and shame. Shall society patiently suffer the wrong and its repetition? * * * The Public School can do its part, but not the whole work, and, in order that it may do its legitimate part, *the child must be placed and held within its influence.*”

3. The Report of Dr. Fraser (now Bishop of Manchester), on the “Common School Systems of the United States and Canada” contains a good deal of information on this subject. He says :—

“From many sections of the community, and especially from those who would be called the educationists, the cry is rising both loud and vehement, that greater stringency is required in the law, and that compulsory attendance is the proper correlative of ‘Free Schools.’ For, it is argued, if the State taxes me, who perhaps have no children, towards the support of the Schools, ‘for the security of society,’ I have a right to claim from the State, for the security of the same society, that the Schools which I am taxed to maintain shall be attended by those for whose benefit they were designed.”

“I cannot close,” says the Superintendent of the Schools in Providence, Rhode Island, “without repeating what I have said in all my former reports, that our Schools are suffering more from the evils of truancy than from all other causes combined.

"Could a true picture of the rapid increase of youthful depravity be portrayed in all its appalling colours, it could not but startle and astonish every friend to humanity and social order. The seed now being sown will produce in coming years a most terrible harvest. Short-sighted must that policy be, independent of all moral considerations, that hesitates to spend a few hundred dollars in the prevention of crime, rather than incur, with all the risks of life and property, the expenditure of thousands in punishing it, and in retrieving the miseries that follow in its train."

III.—HIGHER STANDARD OF QUALIFICATION FOR TEACHERS.

1. On no one subject is there such general unanimity in all educating countries than on the necessity for granting Certificates of Qualification to teachers only after examination. All were agreed upon this point; but all were not equally agreed as to the necessity for due qualifications on the part of the examiners themselves. The difficulty of obtaining the services of qualified persons in the rural parts was often urged as a reason why it should not be insisted upon. All that at first was deemed desirable in this matter was the constitution of *some* local authority for the examination and licensing of teachers, without reference in many cases to any qualifications on the part of the examiners, but that of social or official position. It was felt, too, that Normal Schools, Teachers Institutes and Training Classes in Schools or Colleges would make up in some degree for the lack of professional experience in enquiring into and fixing the standard of a teacher's qualifications for the important duties of his office; and that if teachers wished to take a higher rank in their profession, they could avail themselves of these facilities. But experience has proved how valueless, comparatively speaking, were certificates to teachers obtained from examiners who (though anxious to discharge their duties faithfully) practically knew nothing of teaching themselves, or of the peculiar fitness so necessary to a teacher for the right discharge of the duties of his profession. Teachers, too, were found who were disposed to rest satisfied with certificates obtained under such circumstances; and Schools and pupils alike suffered from a want of ambition or enterprise on the part of such teachers. The depressing effect on the Schools and on the profession itself of such a state of things had been long felt; in the various American States efforts have been made effectually to remedy the evil. The old Examining Boards, often the Trustees themselves, or some official persons in the neighbourhood, have been gradually superseded by professional and trained teachers of the highest grade, and the principle has gained ground that, as in the professions of Divinity, Law, Medicine, Civil Engineering, etc., none but professionally trained teachers should act as examiners for the licensing of teachers for our Public Schools.

PROFESSIONAL BOARDS OF EXAMINERS IN VARIOUS STATES.

2. In the State of Pennsylvania there are four grades of certificates granted, each marks the successive stages of the growth of professional experience. The First, or lowest grade of certificate granted, is a mere license "to begin to teach," and is limited to one year; the Second Grade is given by the County Superintendent to any teacher who can pass an examination in certain literary subjects and in "the theory of teaching;" the Third is simply a "Professional Certificate" permanently good "in the county in which the holder resides, and for one year in any other county;" the Fourth and highest grade is given by the Normal School Board of Examiners, which grant State Certificates, good everywhere in the State, and unlimited as to time, to graduates of Normal Schools of two years standing, who come before them *fully* recommended as good teachers by the proper officers. A similar certificate is given to practical teachers who pass the prescribed examination.

3. In Illinois, "States Certificates are granted to teachers of approved character, scholarship, and successful experience, in virtue of the authority conferred by the School Law, as amended February 16, 1865." The clause which confers such authority is as follows:

"The State Superintendent of Public Instruction is hereby authorized to grant State Certificates to such teachers as may be found worthy to receive them, which shall be of perpetual validity in every County, and School District in the State. But State Certi-

"ficates shall only be granted upon public examination, of which due notice shall be given, in such branches and upon such terms and by such examiners as the State Superintendent and the Principal of the Normal University may prescribe. The fee for a State Certificate shall be \$5. Said certificate may be revoked by the State Superintendent upon proof of immoral or unprofessional conduct.

"Applicants for State Teacher's Diploma are required to furnish satisfactory evidence. 1st—Of good moral character. 2nd—Of having taught with decided success at least three years, one of which shall have been in the State. 3rd—To pass a very thorough examination in orthography, penmanship, reading, mental and written arithmetic, English Grammar, modern geography, history of the United States, algebra, elements of plane geometry, and theory and art of education. 4th—To pass a satisfactory examination in the elementary principles of anatomy and physiology, botany, zoology and chemistry. 5th.—To pass a satisfactory examination in the School Laws of Illinois, especially as relating to the duties and legal rights of teachers."

4. In California, "the granting of State Certificates to teachers is entrusted to a State Board of Examination, composed of the Superintendent of Public Instruction, and four professional teachers, with power to grant certificates for one, two, four or six years, or for life. At the meeting of the State Teachers Institute this year, composed of about six hundred of the leading teachers of the State, it was unanimously resolved: 'That inasmuch as the various County Boards of Examination are composed of many persons of many different degrees of qualification, or no degree in some instances, and therefore form no standard, or data, from which the State Board can judge of their work, the granting of State Certificates on county examinations, or on no examinations, should be discontinued.'

5. In regard to this subject, the State Superintendent thus remarks: "The time is rapidly approaching when teaching must be recognized as a profession; when a diploma from a Normal School, or a certificate of examination by a legally authorized association of teachers, or a State Board of Examination, shall be a license to teach school until revoked by those who issued it. Educational conventions in every part of our country express a general desire for a distinct and definite recognition of the occupation of teaching by forms equivalent to those now existing in law, medicine, and theology. It is true there are many who make teaching a temporary occupation, a stepping-stone to other pursuits, and there is no objection to this, when they are duly qualified for the noblest of human duties; but there is a large class, becoming larger every year, who desire to make it the occupation of a life—an occupation which calls for a range of acquirements and a height of qualification fully equal to that of the liberal professions."

6. In other States the old system continues, while in some the teachers are subjected to periodical examinations without reference to their experience or ability.

7. In Prussia, two means are used to secure the efficiency of teachers: In the first place, "Every teacher must pass a very stringent examination (before a professional board) in the subjects which he proposes to teach, and he is only allowed to teach those in which he has passed, and only to classes of the precise standing for which his knowledge indicates him to be fit; and secondly, every teacher is required to pass a year at some school, watching the work, and learning how it is done."

NEW SYSTEM OF EXAMINATION OF TEACHERS IN ONTARIO.

8. Hitherto, in our own Province, certificates were issued by County Boards of Public Instruction. Each Board consisted of a number of members, most of whom, and in some instances all of whom, have had no experience as teachers; each Board appointed the time as well as place of its own meeting, prepared its own examination papers for three classes of teachers, and has then given certificates according to its discretion, both as to class and duration. Under the new Act, each Board of Examiners consists of not more than five members who have had experience in teaching, and is under the direction of a County Inspector, who must be a First Class Teacher of the highest grade; and the meeting of each Board is appointed to be held the same day in every County and city of the Province. The examination papers for all three classes of teachers are prepared, and the value of each question, and the time allowed for examinations in each subject,

determined by a committee of practical teachers, under the sanction of the Council of Public Instruction,—that committee consisting, at present, of Professor Young (late Grammar School Inspector), and the two Inspectors of High Schools. The examination papers for each County are sent under seal to the County Inspector, which seal is not broken except in the presence of the candidates for examination on the day and at the hour appointed. The merits of the answers to the questions for second and third class certificates are decided upon by each County Board of Examiners; but the answers to the questions for First Class Certificates are transmitted to the Education Department at Toronto, to be decided upon by the Council of Public Instruction on the Report of its Committee of Examiners. Special instructions accompany the examination papers. It is proper to remark here that what have heretofore been termed "*Third Class County Board Certificates*" are not permitted by the provisions of the new Act, and that what are called, and provided for under the new Act as, *Third Class Certificates*, are quite equal, if not above what have heretofore been called *Second Class County Board Certificates*. They are available for three years, and throughout the County in which they are granted. No new candidate for teaching can receive a higher than a *Third Class Certificate* at his first examination, or before the expiration of three years from that time, unless on the special recommendation of the Inspector for his attainments, ability and skill in teaching. No teacher is eligible to become a candidate for a *Second Class Certificate*, who does not produce testimonials of having taught successfully three years; but he may be eligible at a shorter period after having received his *Third Class Certificate*, on the special recommendation of the County Inspector.

9. *Second Class Certificates*, under the new Act, are of much more value, and should be of a higher character, than *First Class Board Certificates* under former Acts, as the latter was limited to a County, and could be cancelled at the pleasure of the Board that granted it; but the former is a life license (during good behaviour), and is available in every part of the Province. Each County Inspector, and the other members of each County Board of Examiners have, therefore, been impressed with the duty of not granting a *Second Class Certificate* to any candidate without satisfactory proof that he or she is a *successful* teacher of three years' standing (except in the case above specified), and a clear conviction in their own minds, that such candidate is qualified to teach all the subjects of the Public School Programme. This is required, not only by the patriotic spirit of the law, and conformity to the objects and principles of the School System, but as an act of common justice to every ratepayer in the Province. The Schools are made *free by law*; and every man in the country is taxed according to his property to support the Public Schools; and every taxpayer has a corresponding right to have his children educated in the Public Schools in all the subjects of the Public School Programme of studies; and he is deprived of this right if a teacher is employed who cannot teach his children these subjects, as far as required. Whether, therefore, the County Boards grant many or few *Second Class Provincial Certificates*, I trust they will give no such Certificate as a personal favour, but simply upon the ground of ability to render the public educational service to the country which the law contemplates, and which every ratepayer has a right to demand.

OBJECTIONS ANSWERED.

1. But it is proper for me to notice objections which have been made to the high standard which is alleged to have been fixed for giving Certificates to teachers, and the expressed belief that many Schools will have to be closed for want of legally qualified teachers. When I state, as I shall presently explain, that I have provided that not a single School throughout the land shall be closed for want of a legally qualified teacher, and yet without lowering the standard of regular Certificates, it will be seen at once how imaginary are the forebodings of certain newspapers and their sympathizing correspondents.

2. Let us now look at the facts of the whole case. It is admitted on all hands, and it was so admitted in the Legislature when the new School Act was a Bill under consideration, that the standard of Public School Teachers' qualifications was too low; that the examinations of teachers by the "County Boards of Public Instruction" were inefficient and unsatisfactory; some called them "shams" and "farces," with very few excep-

tions; all admitted that whatever good these County Boards, as then constituted, had done in the infancy of our School System, they had, in the majority of instances, long outlived their usefulness, either in elevating the qualifications of teachers, or in promoting the efficiency or permanence of the teacher's profession, and that some change was necessary.

3. It was, furthermore, alleged, that undue partiality had been shown in granting Provincial Certificates to students of the Normal School, who were no better qualified than many First Class County Board Teachers, and that these were quite as worthy of a Provincial Certificate as First Class Normal School Teachers. Though I knew the imputation and statement to be utterly unfounded, I concurred in the principle involved in it: namely, that all those teachers throughout the land who are equally well qualified with Normal School Teachers who have received First and Second Class Provincial Certificates, are entitled to Certificates of the same class, and should have the earliest and all possible facilities to obtain them. Accordingly I recommended to the Council of Public Instruction the appointment of a Committee of Examiners, composed of most able and experienced teachers, and wholly unconnected with the Normal School. I first proposed that one and the same set of examination papers for First and Second Class Certificates for Normal School Teachers and other teachers throughout the Province, with the same values of answers to questions; but it was objected, that, as the sessional examination of Normal School Teachers would take place several weeks earlier than the examination of teachers in the various Counties, the papers would become known. My answer was, that I thought this could be prevented by proper precautions, but that if, in some instances, any of the questions should become known to candidates, it would be to the comparative disadvantage of the Normal School candidates, and to the corresponding advantage of non-Normal School candidates for Certificates. But my recommendation was overruled, when I suggested to the Examiners that they would make the papers for the examination of teachers in the Counties somewhat easier than those which had been used in the examination of Normal School Teachers. This, I have been assured, has been done; and it may be shown by comparing the Normal School Examination Papers, published in my last Annual School Report, with the Examination Papers recently used in the County Board examinations, and which were prepared in sets for distribution, and published in the *Journal of Education* for general information.*

4. Now, what is the result? The result is, that but fourteen candidates have presented themselves in all the Counties of the Province for examination for First Class Certificates, and a surprisingly small number of candidates for Second Class Certificates, more than half of whom have failed in the examinations. A majority of more than three-fourths of the candidates have presented themselves for *Third* Class Certificates. Of these, a large number had held First Class County Board Certificates, but many of them are reported to have failed in their examinations for Third Class Certificates. These facts not only authorize the statement, but furnish the most complete demonstration of the injustice of the attacks upon the Normal School system, and of the utter defectiveness of the former County Board examinations of teachers.

5. It now happens that the very parties who have heretofore been most vociferous as to the equal qualifications of First Class County Board Teachers with First Class Normal School Teachers, now complain that the standard of examinations for Certificates

* Another complaint was urged, which is thus replied to by Rev. Professor Young, the Chairman of the Central Board of Examiners:—"The complaint is that all the difficult theoretical questions in the Second Class papers in Algebra were taken from Sangster; none from Todhunter. People would naturally suppose, from such a statement, that the paper contained a large number of theoretical questions. The fact is, that there were only four theoretical questions in it altogether. Of these, one, the last in the paper, was not taken into account in fixing the total number of marks on which the average prescribed by the Council of Public Instruction, in order that a candidate may receive a Certificate of a certain grade, was calculated. This question, therefore, could be an injury to no candidate, though it might be a benefit to some. Of the remaining three theoretical questions, one was taken neither from Sangster nor from Todhunter; and the other two are found in Todhunter, as well as in Sangster. And, to crown all, though Todhunter is authorized as a text-book to be used in Schools, Sangster's Algebra is the only text-book specified by the Council of Public Instruction in their programme for the examination of teachers. In the revised programme for the examination and classification of teachers, prescribed on the 28th of March, 1871, under the heading, "Minimum qualifications for Second Class Provincial Certificates," will be found the following:—"Algebra: To be acquainted with the subject as far as the end of section 153, page 129, of the authorized text-book (Sangster)."

has been suddenly raised too high, in consequence of which many worthy teachers will be disqualified, and many schools must be closed for want of legally qualified teachers. My answer is, that the standard for Provincial Certificates has not been raised at all, but is the same (with some mitigation) as that which has been required in giving Provincial Certificates to Normal School Teachers; and the standard of examinations for *Third Class County Certificates* is the same as that required merely for *admission* to the Normal School. The simple fact is, that these examinations are now made *realities*, and not "shams" and "farces." I am sure that no intelligent man, after examining the programmes for the examinations for even the First and Second Class Provincial Certificates, will say that they are in any respect too high for life-certificates of teachers of Schools, for the support of which all classes of the community are taxed, and on which they are chiefly depending for the education of their children; and I am persuaded that in less than three years, a sufficient number of teachers will become regularly qualified, under these programmes, to supply all the Public Schools of the country, without requiring temporary Certificates at all, except in a few and rare instances.

12. But it is said, "You are, in the meantime, shutting up many schools for want of teachers." I answer, not so; for, though a County Inspector has not authority to give temporary certificates to *rejected* candidates, nor have I authority to authorize him to do so, yet he can do so on the recommendation, or with the consent of a majority of his fellow-Examiners of the County Board, as, in such cases, though the candidates have *failed* in their recent examinations, they may not be considered as having been absolutely *rejected*, when the Examiners recommend temporary certificates to be granted to them. But, in addition, the County Inspector can give temporary certificates to other applicants whom he may find qualified to teach particular schools that might not otherwise be supplied. In this way, not a single school need be closed for want of a legally qualified teacher; and the regular standard of qualifications can be maintained, until teachers become qualified according to it in sufficient numbers to supply all the schools. It is also to be remarked, that the certificates heretofore given by County Boards are perpetuated according to the terms of them, and are not affected by any failures of the holders of them at the recent examinations—not even those certificates given during the *pleasure* of the Board, as no Board has been authorized to cancel any such certificates this year. But it is manifest that a Third Class Certificate under the new system signifies more, and is of more value than many a First Class old County Board Certificate.

13. It is, however, objected again, "It is hard for old teachers to be set aside, because they cannot qualify under the new system." I answer, as government exists not for office-holders, but for the people, so the schools exist not for the teachers, but for the youth and future generations of the land; and if teachers have been too slothful not to keep pace with the progressive wants and demands of the country, they must, as should all incompetent and indolent public officers, and all lazy and unenterprising citizens, give place to the more industrious, intelligent, progressive and enterprising. The sound education of a generation of children is not to be sacrificed for the sake of an incompetent though antiquated teacher. If the younger members of the profession would heartily support the Superannuation provisions of the new law, instead of uselessly declaiming against them, they could entirely remove this objection in the most effective and satisfactory way.

IV.—A FIXED LEGAL STATUS FOR THE PROFESSION OF TEACHING.

1. Another great improvement effected by the new Act has been the giving to the profession of teaching a fixed legal status, and, as a necessary result, the providing for the retirement and support by it of the worn-out members of the profession.

2. For the first time in the school legislation of this Province, and, I believe, in but one or two States of the American Union, a practical knowledge of teaching is made an indispensable condition to the appointment of Public School Inspectors and County or City Examiners. Hitherto, while some efficient and excellent Local Superintendents were appointed, many more were appointed from electioneering and kindred considerations, who were both incompetent for, and indifferent to, the duties of the office. I have been assured by many county councillors, that the legal defining of a local superintendent's qualifications for office would have been a great help in enabling them to resist improper elec-

tioning pressure, and in the selection of the best qualified men for that important work. In the State of Pennsylvania, no one can be appointed to the office of County Superintendent but "*a person of literary and scientific acquirements, and skill and experience in teaching.*" With our former system of Township Superintendents, there was not only no legal standard of qualifications, but *experienced teachers were practically excluded from the office*, because the salary attached to it was insufficient for their support, and they had (as a general rule) no other profession or employment by which to gain a livelihood. But now that the sphere of the office is enlarged, so as to occupy the entire time of the Inspector, and secure to him a support: as the qualifications of it are now duly defined, to be those of a First Class Teacher of the highest grade, it is open to the able and experienced teacher, as the legitimate reward of his merits.

3. In carrying the new law into effect in this matter, the services of several efficient County and City Superintendents were regarded as a sufficient evidence of their qualifications; but for all new candidates, experience in teaching is declared to be an essential qualification for the office, together with a knowledge of subjects taught in the schools. I believe all parties agree that in this respect the new Act contains the mainspring of an immense elevation in the position and usefulness of the teacher's profession. Even in a recent annual association of teachers, the most restless and faultfinding of the number present could not otherwise than express satisfaction with the general provisions of the new Act, and protested against one clause only, the most benevolent clause of the whole Act—the clause which requires each licensed male teacher to pay for the license (or monopoly of teaching which such license gives to him against any unlicensed teacher), at the rate of two dollars each half year towards the support of superannuated or worn out members of his own profession.

FIXING THE MINIMUM SALARIES OF TEACHERS.

1. I had hoped to have still further raised the status of the Teachers' profession by getting the Legislature to fix by law the minimum salary to be paid to Teachers, in accordance with the class of certificate which they held. The principle of fixing the minimum salaries of teachers was concurred in by three-fourths of the County Conventions which I held in 1869. But the minorities in opposition to it were very large, and it was only carried upon the ground that liberal aid might be expected to be given to sections in new and poor settlements. The minimum fixed, though small, was not concurred in by the Legislature.

2. I think one of the most fruitful sources of the change of teachers arises from the pernicious "cheap teacher" system. Dr. Fraser, Bishop of Manchester, in his report, thus forcibly states the case, and gives illustrations. He says (page 69): "In almost all the reports, the rapid changes of teachers are deplored as one of the greatest hindrances to the progress of the schools. The changes occur chiefly in the rural districts, and among the junior teachers of the city (and town) schools." Further on he says: "Indeed, it is the low range of salaries, acting powerfully as a motive upon the general restlessness of the American temperament, which produces those rapid and continual changes in the teaching staff of the schools, the effects of which are so deeply and unanimously deplored. It is thought a great thing to retain the same teacher in the same school for a whole year. A calculation is made, that 'at least one-fourth of the money expended on the schools is thus wasted.' The quietness and success that has marked a school year is attributed chiefly to the employment of the same teachers who had taught for some time in the township before. To find a body of teachers who intend to 'make teaching their business for several years,' excites surprise. And yet it is felt and acknowledged that 'a teacher is worth twice as much the second term as during the first.' 'Frequent change of teachers' is classed with their 'incompetence,' and the 'irregular attendance' of scholars, as the three great 'hindrances' to the successful prosecution of the schools."

3. We cannot but remark that teachers themselves promote, to a large extent, this pernicious system of change. Many of them enter the profession as a temporary expedient, and take a school for a year or more. Such teachers have no motive to improve the schools, or to seek a re-engagement. Their only object is to make a little money out of them, or use them to bridge over some scheme of advancement.

 EXPERIENCE IN TEACHING REQUIRED FROM INSPECTORS AND EXAMINERS.

The official regulations in regard to Public School Inspectors and Examiners, adopted by the Council of Public Instruction, are as follows :

1. *Qualifications of Public School Inspectors.*—All County and City Superintendents of Common or Public Schools, who have held that office consecutively for three years ; all teachers of Public Schools who have obtained, or who shall obtain, First Class Provincial Certificates of qualification of the highest grade (A) ; all Head Masters of Grammar or High Schools, who have taught the same school three years, and who shall prepare and transmit to the Education Department a satisfactory Thesis on the Organization and Discipline of Public Schools ; and all Graduates in Arts, who have proceeded regularly to their degrees in any University in the British Dominions, and who have taught in a college or school not less than three years, and who shall prepare and transmit to the Education Department a satisfactory Thesis on the Organization and Discipline of Public Schools, shall be considered legally qualified for the office of County Inspector of Public Schools, without any further examination, on obtaining, in each case, from the Education Department, the certificate required by law.

2. *Qualifications of Examiners.*—All Head Masters of Grammar or High Schools, and those Graduates in Arts who have proceeded regularly to their degrees in any University in the British Dominions, and have taught in a college or school not less than three years ; all candidates for Degrees in Arts in the Universities of the United Kingdom, who, previously to the year 1864, possessed all the statutable requisites of their respective Universities for admission to such degrees, and have taught in a college or school not less than three years ; and all teachers of Common or Public Schools who have obtained First Class Provincial Certificates of qualification, or who may obtain such certificates under the provisions of the present law, shall be considered as legally qualified to be appointed members of a County or City Board of Examiners, without further examination, on their obtaining from the Education Department, for the satisfaction of the County Council or City Board, a certificate of their having complied with this regulation, and being eligible under its provisions.

Regulations for giving effect to the foregoing.—I. Candidates eligible to act as County or City Examiners will, on application, be furnished with the requisite certificate from the Education Department.

II. A candidate for the office of County or City Inspector of Public Schools, must, in order to be eligible for that appointment, obtain from the Education Department a certificate of his qualification for the office. This will be transmitted to him on his furnishing satisfactory proof that he possesses the legal qualifications. In the case of University Graduates and Head Masters of High Schools, a satisfactory Thesis is required on the Organization and Discipline of Public Schools, &c.

III. The Thesis to be prepared ought not to exceed twenty-five or thirty pages of foolscap, written on one side only, and should embrace the following topics, or subjects, chaptered as numbered, viz. :—

1. Organization of schools ; classification of pupils ; the system of monitor teachers—its use and abuse ; school buildings, and in and out-door arrangements ; school furniture and apparatus, &c.

2. School management ; time tables and limit tables of study ; school rules ; school register ; roll-book ; visitor's book.

3. General principles of education ; art of teaching, with examples of the mode of treating various subjects ; characteristics of the successful teacher ; how to secure attention ; how to interest the class.

4. Characteristics of good style of questioning ; correction of errors ; recapitulations, &c.

5. Principles of mental, moral, and physical culture of childhood ; gymnastics and calisthenics.

6. School discipline ; rewards and punishments ; prizes ; authorized system of merit cards.

7. School libraries ; how best to make them available ; school museums, or local collections—their value, and how to promote their formation and use.

8. Principles of the School Law relating to Public School Trustees, Teachers, and Inspectors of Schools.

DUTY OF TEACHERS TO PROVIDE FOR THE SUPPORT OF THOSE WORN-OUT IN THE PROFESSION.

1. In 1854, the Legislature inaugurated a benevolent scheme for the formation of a fund, out of which to pension the worn-out members of the profession of teaching.* It provided that teachers should contribute four dollars per annum to the Superannuation Fund, while the Legislative body would supplement these contributions by a liberal annual grant. The Legislature performed its part generously, but the teachers, except in a very few isolated cases, failed to do theirs. This they themselves seem to have felt ; and in 1869, they suggested to the Legislature that each person on entering the profession of teaching, should pay a fee of *ten* dollars into the Superannuated Teachers' Fund for his certificate.† In the draft of Bill, as submitted by me to the Government in 1869, I modified this proposal, and provided that “no certificate of qualification should be valid any longer than the holder thereof should pay four dollars per annum into the fund for the support of superannuated or worn out teachers, as provided by law.” This proviso embodied an equitable principle of the English and Dominion Civil Service Acts, and was designed to do much to provide permanency in, and elevate the teachers' profession ; while the salaries of teachers in their agreements with Trustees, would no doubt, in most cases, be augmented in proportion.

2. During the passage of the Bill through the House, this section of the Act was again modified as follows :—“Each male teacher of a public school holding a certificate of qualification under the School Acts of this Province shall, and each such female teacher may, pay into the fund for the support of superannuated school teachers the sum of four dollars annually ; and each Inspector of Schools is hereby authorized and required to deduct one half of such sum semi-annually from any payments made by him to any male teacher under his jurisdiction, and transmit the same to the Education Department ; Provided always, that any teacher retiring from the profession shall be entitled to receive back from the Chief Superintendent one half of any sums thus paid in by him to the fund ; And provided further, that on the decease of any teacher, his wife, or other legal representative, shall be entitled to receive back the full amount paid in by such teacher, with interest at the rate of seven per centum per annum.” Under the new Act, additional provision is thus made which will more than double the fund for the assistance of disabled or worn-out teachers of Public Schools. Among the clergy of different religious persuasions, funds are established by required subscriptions for their relief or partial support in old age. In the Wesleyan body, for example, *every* one of the (now six hundred) ministers is *required* to pay five dollars per annum towards the support of superannuated ministers and their widows—a regulation which has been in force more than a quarter of a century. In the Civil Service in England, from two to five per cent. is deducted from the annual salary of each officer or clerk in the employment of Government towards the support of such officers and clerks in old age. The same principle is embodied in the School Act. But if a teacher leaves the profession, he is entitled to receive back one-half of the sum which he has paid in towards the support of the worn-out members of it, which is even more than a Wesleyan minister could obtain who should abandon his work. The objectors to such an arrangement are chiefly those teachers who do not intend to make teaching the profession of their life, but who make teaching, for the time being, a stepping-stone to some other pursuit or profession. They wish to avail themselves of its *license* to make what money they can out of it, without paying anything in return, even in behalf of those who spend their vigour of life in the work. The subscriptions to this fund are paid through the County Inspectors and Chief Superintendent, and are deposited forthwith in the bank to the credit of the Treas-

* NOTE.—The present Bishop of Manchester, in his Report on the schools of Ontario, after giving the facts, thus speaks of the fund as follows :—“The whole plan does credit both to the wisdom and the liberality of its framers.”

† In Illinois the fee for a Teacher's State Certificate of qualification is \$5.

urer of the Province, as are all the fees of the Model Schools, and the moneys received at the apparatus and library and prize book depositories, and paid out by the Provincial Treasurer to the parties entitled to receive them, on the certificate of the Chief Superintendent.

3. In a recent Report on Popular Education in Victoria, Australia, the principle of compulsory payment to the Superannuation Fund, is discussed as follows: "In the Civil Service of India, retiring pensions are raised partly by compulsory subscriptions to a Superannuation Fund. Among the parochial teachers of Scotland, also, a fund, similarly raised, exists for granting pensions to teachers, and annuities to their widows. The teachers of Baden (and probably of other German States) enjoy, I learn, the benefits of an exactly similar plan; and, for the like good object, a fund is in the same way created among the Clergymen of the Presbyterian and other Churches. Upon this principle, it would be easy to establish, without extra cost to the State, a Teachers' Superannuation Fund, to be raised by compulsory deductions made by the Board of Education from salaries and results only. As this subject is a very important one, I may be excused for going into details, and will therefore jot down my ideas as to the basis on which it should be developed. The Superannuation Fund should be created by *compulsory* contributions from all teachers, assistant teachers, pupil-teachers, and work-mistresses, directly recognized by the Board of Education. The contributions should consist in a deduction of — per cent, made by the Board of Education, half-yearly, monthly, or otherwise, from the salaries and result payments to every school in receipt of aid. The rate of pension, varying according to sex and classification, should be so much for every year of service up to a given maximum. Pensions for teachers' widows should be awarded on the same principle. I deem it indispensable that a Fund should be raised by *compulsory contributions*, and that it should be managed by the Board of Education, who alone have the necessary machinery to make its collection and distribution an easy matter. My own belief, fortified by the opinion of the leading teachers in my district is, that the establishment of such a Fund would confer great advantages; it would comfort the declining years of aged teachers worn out by good service; and it would offer an inducement to present teachers to continue in their occupation, and devote the best years of their life to teaching; and, further, it might attract into the teachers' ranks many more men of the best and most desirable type."

OBJECTION BY A CERTAIN CLASS OF TEACHERS TO CONTRIBUTE TO THE FUND.

4. Notwithstanding the great boon conferred upon teachers by the establishment of such a Fund for their benefit, a certain class of objectors has sought to create hostility to the Fund and to the mode of contributing to it. The agitation on the subject is being promoted by two small sections of the teachers of our Public Schools—those who do not intend to remain in the profession, but make use of it as a stepping stone to something else;* and those who are penurious or selfish. A third section, of the more thoughtful and devoted members of the profession, have, without due consideration, unwittingly given their countenance to this unwise and unjust agitation.

5. As to the necessity for this Fund, we would say, that so long as teachers devote their lives to a profession so generally underpaid as theirs is, so long will there be a necessity for either friends (if there be any, but who are often poor themselves), or the teachers themselves, to provide for the quiet and comfort of the declining years of their brethren, who, in less prosperous days, and with scanty remuneration, led the van in that calling in which they feel proud to follow. Even now, at the salary given to teachers (considering the increased cost of living) it is almost impossible to lay by a sum which would realize more than a few dollars a year. But by availing themselves of the provisions of the new Act, teachers can, on the payment of a small sum of two dollars each half year, secure an allowance for life, after their retirement from the profession, of six dollars a year for every year they may have taught school. For instance, if a teacher has been twenty-five years in the profession, and has complied with the law and regulations on the subject, he

*NOTE.—We have shown, in this Report, the pernicious influence of such teachers upon the schools. They lower the tone and *esprit* of the profession, are a fruitful cause of change in teachers, give a temporary and fugitive character to teaching, and thus bring discredit both upon the profession and the schools.

will, on his retirement, be entitled to an allowance of \$150 a year for life, should the Fund permit it,—although, at four dollars a year, he will have only paid \$100 in all into the fund; if he has been twenty years teaching, he will secure an allowance of \$120 a year, although his total subscriptions for the twenty years have only been \$80 in all; if for fifteen years \$90, total subscriptions \$60 in all; and if for ten years \$60 a year, while he has only paid \$40 in all into the Fund. In other words, he will receive for his first year's pension fifty per cent. more than he has paid into the Fund altogether! These facts are irresistible, and only show what a boon the teachers are thoughtlessly throwing away in petitioning against their contributing to the Fund, as provided by law. For it should not be forgotten that, if the clause of the new law on the subject is repealed, the entire law on the subject will, no doubt, be swept away, and the \$6500 per annum now generously given to the old teachers by the Legislature, will be withdrawn. In that case teachers will be left to provide for their old age as they best can, or rather they will be left with no provision whatever for their retirement from the profession.

THE OLD TEACHERS KEEP DOWN THE GENERAL SCALE OF REMUNERATION.

6. There is another reason why, in the interests of the profession, the Superannuated Teachers' Fund should be sustained by them. Among the more than 5,000 teachers in Ontario, some hundreds are getting advanced in life, and many of them are even old and infirm. Because of their age and infirmity they find it difficult to get employment, and yet, for want of means of support, they cannot retire and make way for younger men. The consequence is, that they offer their services at a very low rate, and thus find employment, to the exclusion of better teachers at a higher salary. Thus, in their need, they help to keep down the rate of remuneration, which would otherwise be paid to more active teachers, while they keep up a competition from which the other teachers are made to suffer. Would it not, therefore, be better for all parties concerned, that the younger teachers should provide for the honourable retirement of a section of their own profession grown grey in the service, and enfeebled by their sedentary life? This feature of the question has been pressed upon the attention of the Department, and we present it in the following extract from the letter of a highly respected inspector, who has felt the embarrassment arising from the existence of old teachers in his county. He says:—

"There are a few old teachers in this county who, perhaps, answered an important purpose in the teacher's calling twenty-five or thirty years ago, but whose stereotyped methods of procedure in the school-room are opposed to every kind of modern improvement in the art of teaching. It has become a serious matter with our Board of Examiners to know what is to be done with such teachers. They are poor, and have not yet made the necessary payments into the Superannuation Fund." He then asks if they can be placed on the Superannuation list, and desires other information on the subject, etc.

7. Now teachers will see that if (as has been the case for many years, when the matter was left to their voluntary action) they refuse to sustain the fund in the manner provided by law, they can neither expect to superannuate their older, worn-out brethren, nor can they, with any show of justice or propriety, ask the Legislature even to make the generous grant which it has done for the past few years, but which, it is well known, is quite inadequate for the maintenance of the fund. The agitation has raised the question of the very existence of the fund itself; and, if the younger teachers refuse to make the small sacrifice, in the interests of their profession, of paying two dollars every half year into the fund (from which they themselves will derive a substantial benefit), and in the maintenance of which they are interested, how can they expect the Legislature—which has recently so greatly raised the standard of their qualification, and incidentally of their emoluments—to provide for their retirement from the profession and support when they are worn out? In this view of the case, we think teachers have not sufficiently weighed the matter in this agitation, but we trust that they will be induced to do so, when they consider the foregoing facts.*

* NOTE.—An Inspector writing on this subject says:—

"It cannot be denied that the fund itself is a most excellent one, and that it has already proved a great boon to many members of the profession.

ON WHAT PRINCIPLE SHOULD THIS FUND BE SUPPORTED.

8. In reply to the question "on what principle should this fund be supported?" We answer, on the principle already laid down in its establishment, that of the mutual co-operation of the Teachers and the Government. This principle is one which commends itself to the judgment of teachers, and yet they have not carried it out. While the Government have generously contributed to the fund \$4,000 per annum, and have even increased the fund of late years to \$6,500 per annum, the teachers, as a body, have done nothing. An isolated case here and there of an expectant claimant on the fund does send in his \$4 a year, but the teachers, as a body, have failed to do their duty in the matter. Low salaries, selfishness, and a temporary interest in a profession which they did not mean to follow, have operated to produce this state of things. Now, however, the country is prosperous; salaries have been increased; this profession itself has been placed on a recognised footing, and it is right and proper for the Legislature, which has thus afforded facilities to elevate the teaching profession, to see that the old worn-out members of the profession shall be provided for, and not remain as a hindrance to progress.

SHOULD THE TEACHERS SUSTAIN THE SUPERANNUATED FUND?

9. We think we have already anticipated the answer to the question "Who should sustain this fund?" and, therefore, need not dwell upon it. In fact, the teachers have themselves answered it, but in a form which, in practice, would be felt by them to be onerous, if not oppressive. At a meeting of the Public School Teachers' Association of the Province of Ontario, held in 1869, a series of resolutions was passed, embodying certain amendments to the School Bill then before the Legislature. Amongst those agreed to by the Teachers' Association was the following one, which involved the very principle of *compulsion*, against which teachers now object:—"Each candidate, at his or her first examination for a certificate of qualification, shall deposit with the County Superintendent the sum of ten dollars, to be paid into the Superannuated Teachers' Fund, of which five dollars shall be refunded in case of failure." In other words that, before a teacher is in a position to earn one penny in his profession, he shall be compelled to pay ten dollars into the fund. How much easier to the teacher, more equitable in principle and better in every respect is the provision of the law (against which the agitation has been raised) that no one but members actually in the profession, who have derived their means of support from it, should be called upon to contribute to a fund intended for their support on their retirement from it? That this is felt by teachers to be the case, we learn from the following resolution, which was recently agreed to at a Convention of Teachers for the West Riding of the County of Durham:—

"Resolved that we hear with sorrow that an effort is being made to repeal the clause

"It cannot be denied that it will prove a great pecuniary advantage to every teacher who makes teaching a profession, and not a stepping stone to something else, and for these alone the fund is intended.

"It cannot be reasonably denied that it is as just to impose a license upon teachers, as upon lawyers, hotel-keepers, auctioneers, pedlars or dry goods merchants, and let the grumblers just compare for a moment the paltry \$4 license of the teacher with some other licenses which frequently reach \$100 per annum. Moreover the teacher's hardships sink into insignificance when it is stated that his license, when paid, is invested at interest for his benefit in old age, and along with it \$6,500 a year added by the Government.

"It cannot be denied that the very Act which imposes the license, by raising the standard of qualification and thus limiting the supply, has already had or will soon have the effect of raising the salaries of teachers by an increase ten times as great as the license imposed.

"It cannot be denied that this agitation originated with, and is now chiefly carried on by those Teachers who have adopted teaching not as a profession, but as a temporary expediency. They are generally smart men possessing a tolerably fair opinion of themselves, and evincing a large amount of cleverness and success in obtaining the most lucrative situations in advance of the really professional teacher. The Superannuated Fund was never intended for such; and they are the last that should find fault with a profession that serves them so good a turn, or malign those legislators who have with the greatest wisdom and liberality made this noble provision for the meritorious teacher in his old age, and who are endeavouring to raise the profession to a respectability that will induce clever men to adopt teaching as the business of their lives again. Again they complain that the license is compulsory, of course it is. But it is no more compulsory than other licenses, and teaching is not compulsory. If they do not choose to pay the license to teach, they are at liberty to buy an hotel-keeper's license, or an auctioneer's license, or to follow some pursuit that requires no license.

"I have had the pleasure of conversing with several gentlemen of position outside the profession, on this subject, and all argue that the Fund is a good one, that the four dollar license is not an insult, and that the present agitation is impolitic and against the best interests of the profession."

in reference to the Superannuated Fund, and that we feel a debt of gratitude to Dr. Ryerson for the introduction of said clause, believing it to be one of the most beneficial amendments in the New School Act."

OFFICIAL REGULATIONS IN REGARD TO THE SUPERANNUATION FUND.*

10. The regulations for the administration of the Superannuated Teachers' Fund, adopted by the Council of Public Instruction, are as follows:—

(1.) Teachers who became superannuated, or worn out, on or *before* the first day of January, 1854, and who produce the proofs required by law, of character and services as such, may share in this Fund according to the number of years they have respectively taught a Public School in Ontario, by depositing with the Chief Superintendent of Education, the preliminary subscriptions to the Fund required by law.

(2.) Every Teacher engaged in teaching *since* 1854, in order to be entitled, when he shall have become superannuated or worn out, to share in this Fund, must have contributed to it at the rate of five dollars per annum for each year, from the time when he began to teach, up to the time of his first annual subscription of four dollars (as required by the statute), for each subsequent year during which he was engaged in teaching. No subscriptions, either for arrears or otherwise, can be received from those who have ceased to teach, [and in all cases the annual payment, unless made within the year for which it is due, will be at the rate of five dollars.]

(3.) No Teacher shall be eligible to receive a pension from this Fund, who shall not have become disabled for further service, while teaching a Public School, or who shall not have been worn out in the work of a Public School Teacher.

(4.) All applications must be accompanied with the requisite certificates and proofs, according to the prescribed form and instructions. No certificate in favour of an applicant should be signed by any Teacher already admitted as a pensioner on the Fund.

(5.) In case the Fund shall at any time not be sufficient to pay the several claimants the highest sum permitted by law, the income shall be equitably divided among them, according to their respective periods of service.

* NOTE.—APPLICATION FOR PENSION AS A SUPERANNUATED OR WORN OUT TEACHER.—(Minute No. 322.)

(Post Office.)

(Date.)

187 .

The undersigned, an applicant for aid from the Superannuated or Worn out Teachers' Fund, hereby respectfully represents to the Chief Superintendent of Education—

1. That he is _____ years of age.
2. That he was born (state the Country of birth) in _____
3. That he commenced the profession of teaching in _____, in the year one thousand eight hundred and _____
4. That he is connected with the _____ Church.
5. That he commenced teaching a Public School in Ontario, in School Section number _____, in the Township of _____, County of _____, in the year one thousand eight hundred and _____
6. That he has held certificates of qualification from _____, and that last certificate is from the Board of Examiners for _____, is dated _____, and is for the _____ class.
7. That since he commenced teaching in the Province, he has been engaged as a teacher in the following places:—
8. That he has taught a Public School in Ontario for the full period of _____ years, and has subscribed to the fund for the years _____
9. That he has become disabled or worn out while in the work of teaching, and is unable to teach a school any longer.
10. That he ceased teaching the Public School in Section No. _____, in the Township of _____, County of _____, on the _____ day of _____, 18 _____, and that he has not since been employed as a Public School Teacher.
11. That he, having become, in terms of the Act, incapacitated by infirmity from further service as a Public School Teacher, he respectfully applies for a pension from the Superannuated Public School Teachers' Fund.

(Sign name in full.)

REMARKS.—The foregoing application must be filled up in every particular, and be accompanied with satisfactory evidence on the following points:—

1. Of the good moral character, and sober steady habits, of the applicant.
2. Of the length of time such applicant has been engaged in teaching in Ontario, and for which he asks a pension.
3. From medical testimony, according to the prescribed form, that the applicant is unable to pursue that profession any longer.

(6.) Communications and subscriptions in connection with this Fund, are to be sent to the Chief Superintendent of Education.

V.—COMPREHENSIVE COURSE OF STUDY FOR THE PUBLIC SCHOOLS.

1. In dealing with this most important question, and in laying down a few general rules in regard to it, the following weighty words of the Bishop of Manchester, in his admirable report on the "School Systems of the United States and Canada," are highly suggestive:—

"The mistake that is commonly made in America, is one, I fear, that is taking some 'root in England—a confusion of thought between the processes that convey knowledge, and the processes that develop mental power, and a tendency to confine the work of the school too exclusively to the former. It is, perhaps, the enevitable tendency of an age of material prosperity and utilitarian ideas. Of course, the processes of education are 'carried on through *media* that convey information too, and a well educated man, if not 'necessarily is, at any rate, almost necessarily *becomes* a well informed man. But in my 'sense of things, the work of education has been successfully accomplished when a scholar 'has learnt just three things—what he really *does* know, what he does *not* know, and *how* 'knowledge is in each case acquired; in other words, education is the development and 'training of *faculties*, rather than to use a favourite American word, the 'presentation' 'to the mind of *facts*. What was Aristotle's conception of the man whom he calls— 'thoroughly educated?' Not, I take it, a man of encyclopædic information, but a man 'of perfectly trained and well-balanced mind, able to apply to any subject that may oc- 'cupy his attention, its proper methods, and to draw from it its legitimate conclusions. 'Hence the proper functions of a sound system of education are to quicken the observa- 'tion, strengthen the memory, discipline the reason, cultivate the taste; and that is the 'best system which gives to each faculty of our complex nature its just and proportionate 'development."

2. In the programme of studies, and limit table, adopted after due consideration, for our Schools in Ontario, the subjects essential to a good Public School education are prescribed and classified, as also the number of hours per week of teaching each subject; but the mode or modes of teaching and illustrating the several subjects specified in order, is left to the independent exercise of the genius and talents of each teacher. In preparing this programme, the Reports of the latest Royal Commissioners of England on Popular Education, and the opinions of the most experienced educationists, have been consulted. It will be seen from the number and order of the subjects, and the time prescribed per week for teaching each of them, that the first years of Common School studies are almost entirely devoted to teaching the three primary and fundamental subjects of a good education—reading, writing and arithmetic, including only such other subjects and to such a degree, as to relieve the pupils from the tedium of the more severe and less attractive studies, and to develop their faculties of observation and taste for knowledge, as suggested by the largest experience of the most advanced educators. The subjects of the programme are limited in both number and range to what is considered essential, and to what experience has proved can be thoroughly mastered by pupils of ordinary capacity and diligence within thirteen years of age. The thorough teaching of a few subjects, within practical limits, will do more for intellectual development, and for the purposes of practical life, than the skimming over a wide range of topics. The subjects of Natural Science required by the thirteenth section of the new School Act to be taught in the schools and provided in the programme, are such, and are prescribed to such an extent only, as is absolutely necessary for the advancement of the country,—in agriculture, the mechanical arts, and manufactures, apart from science and literature. And when the cheap and excellent text-books prescribed are examined in connexion with the subjects specified, it will be found that nothing has been introduced which is impracticable, or for mere show, but everything for practical use, and that which admits of easy accomplishments.

EDUCATION DIRECTED TOWARDS THE PURSUITS AND OCCUPATIONS OF A PEOPLE.

On this subject, Dr. Playfair gives the following striking illustration. He goes on to say:—

"The great advantage of directing education towards the pursuits and occupations of the people, instead of wasting it on dismal verbalism, is that, while it elevates the individual, it at the same time gives security for the future prosperity of the nation. There are instances of nations rich in natural resources of industry, yet poor from the want of knowledge, how to apply them; and there are opposite examples of nations utterly devoid of industrial advantages, but constituted of an educated people who use their science as a compensation for their lack of raw material. Spain is an example of the first class, and Holland of the second. Spain, indeed, is wonderfully instructive, and her story is well told by Buckle, for you see her rise in glory or fall in shame, just as there are conditions of intellectual activity or torpor among her inhabitants. Sometimes animated with life, Spain seeks a high position among nations; at other times she is in a death-like torpor. She is an apt illustration of that sentence: 'He that wandereth out of the way of understanding, shall remain in the congregation of the dead.' The Jews brought into Spain their habits of industry, and later, the Moors introduced the experience and science of their time; and they took root even in a country devastated by wars between Christians and Mahomedans. But Spain committed two great national crimes—the expulsion of the Jews at one time, and of the residue of the Moors at another. The last crime of 1609, by which 1,000,000 of Moriscos were thrust forth from the kingdom, was avenged by suddenly depriving Spain of the accumulated industrial experience and science of centuries. After that act, education was only allowed so far as it did not interfere with ecclesiastical fears, and the country fell into a state of abject misery and dejection. A century after, the Duke de St. Simon, then French ambassador at Madrid, declared that science in Spain is a crime, and ignorance a virtue. During the next century, there was a period of three generations when foreign science and experience were imported by the Spanish kings, and the country began to rise again to some condition of education and prosperity. But in the last half-century it has relapsed, ecclesiastical power having again assumed its old sway, and Spain has returned to a position of obscurity, from which, let us hope, she may emerge by her late revolution. For this nation has everything in the richest profusion to make it great and prosperous. Washed both by the Atlantic and Mediterranean, with noble harbours, she might command an extensive commerce both with Europe and America. Few countries have such riches in the natural resources of industry. A rich soil and almost tropical luxuriance of vegetation might make her a great food-exporting nation. Iron and coal, copper, quicksilver and lead abound in profusion, but these do not create industries, unless the people possess knowledge to apply them. When that knowledge prevailed, Spain was indeed among the most advanced of industrial nations. Not only her metallurgic industries, but her cotton, woollen and silk manufactures were unequalled; her shipbuilding also was the admiration of other nations. But all have decayed because science withers among an uneducated people, and without science nations cannot thrive. Turn to Holland, once a mere province of Spain. She has nothing but a maritime position to give her any natural advantage. Not so bad, indeed, as Voltaire's statement, that she is a land formed from the sand brought up on the sounding-leads of English sailors, though she is actually created from the debris of Swiss and German mountains brought down by the Rhine. Hence within her lands are no sources of mineral wealth; but she has compensated for its absence by an admirable education of her people. For my own country, I have no ambition higher than to get schools approaching in excellence to those of Holland. And so this mud-produced country, fenced round by dykes to prevent the ocean from sweeping it away, is thriving, prosperous and happy, while her old mistress—Spain—is degraded and miserable, unable in all Europe until lately to find a King who would undertake to govern her ignorant people."

THE NEW SUBJECTS OF AGRICULTURE, COMMERCIAL INSTRUCTION, MECHANICS, DRAWING,
PRACTICAL SCIENCES AND NATURAL HISTORY.

1. I may remark that one great object of the new School Act was to make our Public Schools more directly and effectively subservient to the interests of agriculture, manufactures and mechanics.

2. In my first special report on "a system of Public Elementary Education for Up-

per Canada," laid before the Legislature in 1846, I stated the institutions necessary for these purposes; and in the concluding remarks of my last two annual reports, I have expressed strong convictions on the subject. When we consider the network of railroads which are intersecting, as well as extending from one end to the other of our country, the various important manufactures which are springing up in our cities, towns and villages, and the mines which are beginning to be worked, and which admit of indefinite development, provision should undoubtedly be made for educating our own mechanical and civil engineers, and chief workers in mechanics and mines; but I here speak of the more elementary part of the work of practical education, which should be given in the ordinary Public Schools.

3. It must be admitted that though the general organization of our Public School System is much approved, and although the schools themselves have improved; yet that the knowledge acquired in them is very meagre—extending for practical purposes very little, and in many cases not at all, beyond what have been termed the three R's—Reading, 'Riting and 'Rithmetic, and that rather elementary. If the system of schools cannot be greatly improved, what is taught in the schools should be greatly advanced and extended, I entirely agree with the Hon. Mr. Carling, Commissioner of Agriculture, who, in a late able report, remarks:—

"Notwithstanding the great advancement we have made within a period comparatively short, I have a growing conviction that something more is required to give our education a more decidedly practical character, especially in reference to the agricultural and mechanical classes of the community, which comprise the great bulk of the population, and constitute the principal means of our wealth and prosperity. What now appears to be more specially needed in carrying forward this great work is, in addition to the ordinary instruction in Common Schools, the introduction of the elementary instruction in what may be termed the foundation principles of agricultural and mechanical science."

4. These views, to a limited extent, have been successfully acted upon in our Normal and Model Schools, but I propose to carry them into more certain and general operation, by the additional Lectureship in the Normal School, which has been established for the special purpose of preparing teachers to teach the subjects indicated in the Public and High Schools, and to make the teaching of them a part of the programme of instruction in our Public Schools. We have, already, in the Educational Museum the specimens of models necessary for a school of both the fine and some of the mechanical arts; and I trust there will soon be supplemented Schools of mechanical and civil engineering, if not of architecture, as also of manufactures and agriculture. But what I have said relates to the elementary education which may be imparted on these subjects in the Public and High Schools.

THE WAY IN WHICH THIS INSTRUCTION SHOULD BE GIVEN.

1. As to the only way in which instruction in these subjects should be given, we quote the following strikingly forcible language of Dr. Lyon Playfair on the subject. He says:

"The pupil must be brought in face of the facts through experiment and demonstration. He should pull the plant to pieces, and see how it is constructed. He must vex the electric cylinder till it yields him its sparks. He must apply with his own hand the magnet to the needle. He must see water broken up into its constituent parts, and witness the violence with which its elements unite. Unless he is brought into actual contact with the facts, and taught to observe and bring them into relation with the science evolved from them, it were better that instruction in science should be left alone. For one of the first lessons he must learn from science is not to trust in authority, but to demand proof for each asseveration. All this is true education, for it draws out faculties of observation, connects observed facts with the conceptions deduced from them in the course of ages, gives discipline and courage to thought, and teaches a knowledge of scientific method which will serve a life time. Nor can such education be begun too early. The whole yearnings of a child are for the natural phenomena around, until they are smothered by the ignorance of the parent. He is a young Linnæus roaming over the fields in search

"of flowers. He is a young conchologist or mineralogist gathering shells or pebbles on the sea shore. He is an ornithologist, and goes bird nesting; an ichthyologist, and catches fish. Glorious education in nature, all this, if the teacher knew how to direct and utilize it. The present system is truly ignoble, for it sends the working man into the world in gross ignorance of everything that he has to do in it. The utilitarian system is noble in so far as it treats him as an intelligent being who ought to understand the nature of his occupation, and the principles involved in it. If you bring up a ploughman in utter ignorance of everything relating to the food of plants, of every mechanical principle of farm implements, of the weather to which he is exposed, of the sun that shines upon him, and makes the plants to grow, of the rain which, while it drenches him, refreshes the crops around, is that ignorance conducive to his functions as an intelligent being? All nations which have in recent years revised their educational systems, have provided a class of Secondary Schools for the industrial classes, especially devoted to teach them the principles of science and art relating to their industries. Holland compels every town of 10,000 inhabitants to erect such schools."

NECESSITY FOR TEACHING PRACTICAL SCIENCE IN THE SCHOOLS—EXAMPLES.

1. What Dr. Lyon Playfair has remarked, in an opening address to the Educational Section of the Social Science Congress held last year at Newcastle, in regard to English Elementary Schools and the teaching of practical science in them, applies largely to Canada:

"The educational principle of Continental nations is to link on primary schools to secondary improvement schools. The links are always composed of higher subjects, the three R's being in all cases the basis of instruction; elementary science, and even some of its applications, is uniformly encouraged and generally enforced. But as we have on schools corresponding to the secondary improvement schools for the working classes, we suppose we can do without, used as links. No armour-plate of knowledge is given to our future artizan but a mere veneer of the three R's, so thin as to rub off completely in three or four years of the wear and tear of life. Under our present system of elementary teaching, no knowledge whatever, bearing on the life-work of a people, reaches them by our system of State Education. The air they breathe, the water they drink, the tools they use, the plants they grow, the mines they excavate, might all be made the subjects of surpassing interest and importance to them during their whole life; yet of these they learn not one fact. Yet we are surprised at the consequences of their ignorance. A thousand men perish yearly in our coal mines, but no school master tells the poor miner the nature of the explosive gas which scorches him, or of the after damp which chokes him. Boilers and steam-engines blow up so continually that a Committee of the House of Commons is now engaged in trying to diminish their alarming frequency, but the poor stokers who are scalded to death, or blown to pieces, were never instructed in the nature and properties of them. In Great Britain alone more than one hundred thousand people perish annually, and at least five times as many sicken grievously, out of pure ignorance of the laws of health, which are never taught them at school."

2. In regard to the study of Natural Science in the Schools, the Royal Commissioners appointed to enquire into systems of Schools, say:—

"We think it established that the study of Natural Science develops better than any other studies the observing faculties, disciplines the intellect by teaching induction as well as deduction, supplies a useful balance to the studies of language and mathematics, and provides much instruction of great value for the occupations of after life."

THE STUDY OF NATURAL HISTORY IN THE SCHOOLS.

1. In further illustration of this subject, I beg to add a few words by Professor Agassiz, formerly a distinguished teacher in Switzerland, latterly a more distinguished professor in the United States. In an address at an educational meeting in Boston "on the desirability of introducing the study of natural history into our Schools, and of using that instruction as a means of developing the faculties of children and leading them to a knowledge of the Creator," Professor Agassiz observes:

"I wish to awaken a conviction that the knowledge of nature in our days lies at the very foundation of the prosperity of States ; that the study of the phenomena of nature is one of the most efficient means for the development of the human faculties, and that, on these grounds, it is highly important that this branch of education should be introduced into our Schools as soon as possible. To satisfy you how important the study of nature is to the community at large, I need only allude to the manner in which, in modern times, man has learned to control the forces of nature, and to work out the material which our earth produces. The importance of that knowledge is everywhere manifested to us. And I can refer to no better evidence to prove that there is hardly any other training better fitted to develop the highest faculties of man than by alluding to that venerable old man, Humboldt, who was the embodiment of the most extensive human knowledge in our day, who acquired that position, and became an object of reverence throughout the world, merely by his devotion to the study of nature. If it be true then, that a knowledge of nature is so important for the welfare of States and for the training of men to such high positions among their fellows, by the development of their best faculties, how desirable that such a study should form part of all education ! And I trust that the time when it will be introduced into our Schools will only be so far removed as is necessary for the preparation of teachers capable of imparting that instruction in the most elementary form. The only difficulty is to find teachers equal to the task, for, in my estimation, the elementary instruction is the most difficult. It is a mistaken view with many, that a teacher is always efficiently prepared to impart the first elementary instruction to those entrusted to his care. Nothing can be further from the truth ; and I believe that in entrusting the education of the young to incompetent teachers, the opportunity is frequently lost of unfolding the highest capacities of the pupils, by not attending at once to their wants. I have been a teacher since I was fifteen years of age, and I am a teacher still, and I hope I shall be a teacher all my life. I do love to teach ; and there is nothing so pleasant to me as to develop the faculties of my fellow beings who, in their early age, are entrusted to my care ; and I am satisfied that there are branches of knowledge which are better taught without books than with them ; and there are some cases so obvious, that I wonder why it is that teachers always resort to books when they would teach some new branch in their schools.—When we would study natural history, instead of books let us take specimens—stones, minerals, crystals. When we would study plants, let us go to the plants themselves, and not to the books describing them. When we would study animals, let us observe animals."

2. Thomas Carlyle wrote,—“For many years it has been one of my constant regrets, that no schoolmaster of mine had a knowledge of natural history, so far, at least, as to have taught me the little winged and wingless neighbours that are continually meeting me with a salutation which I cannot answer, as things are ; but there will come a day when, in all Scottish towns and villages, the schoolmasters will be strictly required to possess such capabilities.”

THE VALUE OF DRAWING IN OUR SCHOOLS.

1. So important and necessary was drawing (which is now prescribed in our Schools), felt to be, as a branch of learning, that in 1870, the Legislature of Massachusetts passed the following law on the subject :

“The General Statutes are hereby amended so as to include Drawing among the branches of learning which are by said Section required to be taught in the Public Schools.

“Any City or Town may, and every City and Town having more than ten thousand inhabitants shall, annually make provision for giving free instruction in Industrial or Mechanical Drawing, to persons over fifteen years of age, either in day or evening schools, under the direction of the School Committee.”

2. On this enactment, the Secretary of the Board of Massachusetts remarks :

“This is one of the most important laws of the Session of 1870, and is destined, I

"doubt not, to produce lasting and beneficial results. It will not, therefore, be out of place, to give a brief account of the steps which led to its enactment. * * *

"In response to a petition presented to the Legislature, in June, 1869, by several of the leading citizens of Boston, a Resolve was passed directing the Board of Education "to consider the expediency of making provision by law for giving free instruction to "men, women, and children in mechanical drawing, either [in existing schools, or those "to be established for that purpose, in all the towns in the Commonwealth having more "than five thousand inhabitants, and report a definite plan therefor to the next general "Court."

"The Board cordially entered upon the task thus committed to them. * * * *
"The Petition and Resolves were referred to a Special Committee, with instructions to "make such enquiries as they deemed advisable, and report their conclusions for the "consideration of the whole Board. This resulted in the issuing of a circular, asking for "the opinions of gentlemen connected with the various mechanical and manufacturing "industries of the Commonwealth, of others familiar with the workings of our system of "Public Instruction, and especially of gentlemen eminent for their skill and experience in "this particular department of instruction.

"The communications received were presented to the Board, accompanied by a brief "and able report. The report presented met with the unanimous approval of the Board, "and it was voted to recommend to the Legislature the following action, to wit:

"That a law be passed requiring: 'First, that elementary and freehand drawing be "taught in all the Public Schools of every grade in the Commonwealth; and, Second, "that all Cities and Towns having more than ten thousand inhabitants be required to "make provision for giving annually, free instruction in industrial or mechanical drawing "to men, women, and children in such manner as the Board of Education shall prescribe.'

"The recommendations were favourably received by the Legislature, and embodied in "the foregoing Act, and in an Order of the House of Representatives to print in pamphlet "form two thousand copies of such of the communications above named as the Board "should designate."

"These are papers of rare value, treating of the subject of drawing in its relation to "general education, to our various mechanical and manufacturing industries, to high culture "in art, and indicating the most approved methods of teaching it, both in the Public "Schools, and in special classes."

3. The English Commissioners in their report thus summarise the opinions of those gentlemen examined by them in regard to the subject of Drawing. They say:

"Mr. Stanton remarks that 'whether we regard it as a means of refinement, or as an "education for the eye, teaching it to appreciate form, or as strengthening habits of "accurate observation, or again as of direct utility for many professions and trades, it is "equally admirable.' Dr. Hodgson stated it as his opinion that 'drawing should be "taught to every child as soon as he went to school, and added that it was already taught "to all the boys (nearly 1,000) in the Liverpool Institute.' From Mr. Samuelson's letter "to the Vice-President of the Committee of Council on Education, drawing appears to be "always regarded as a most important subject of instruction in the technical schools on the "continent; and the bearing of this on the excellence ascribed to the foreign artisans and "superintendents of labour cannot be mistaken."

PROVISION FOR TEACHING VOCAL MUSIC IN OUR SCHOOLS.

1. Vocal music being now required to be taught in our Schools, we insert the following striking illustration of its value and importance as a softening and humanizing influence as a subject of instruction, from the report of the Secretary of the Board of Education in Connecticut, for this year. It will be seen how successfully he combats the statement so often put forth that instruction in vocal music is of no practical use to large numbers of children, because of their inability to sing. He says:

"Music is taught in our best Schools and should be in all. In many instances it has "taken its proper place as one of the regular studies. It is the testimony of multitudes

“of Teachers, that music helps instead of hindering progress in other studies. It stimulates the mental faculties and exhilarates and recreates pupils, when weary with study. Some branches are pursued largely for the mental discipline which they impart. No study that can be taken up so early, is a better discipline in rapid observation and thinking; none so early and easily develops the essential power of mental concentration. In singing by note, a child must fix his thoughts and think quickly and accurately. The habit of fixing the attention thus early formed, will aid in all other studies. There is abundant testimony that Scholars progress more rapidly in the common branches, where singing is taught. Vocal music aids in graceful reading, by promoting better articulation, improving the voice and correcting hard and unpleasant tones. The influence in cultivating the sensibilities, improving the taste and developing the better feelings of our nature, amply compensate for the time required for this study. Its efficacy in School Government, making work a play, giving a systematic recreation—enjoyed the more because always in concert, and with the sympathy and stimulus of companionship—is admitted by the most successful Teachers. Trouble in the school-room often comes from that restlessness, which proper intervals of singing would best relieve. Singing is a healthful, physical exercise. In primary schools, gymnastic exercises often accompany the singing. When children are trained to erectness of posture, and to the right use of the vocal organs, speaking, reading and singing are most invigorating exercises; expanding the chest, promoting deep breathing, quickening the circulation, and arousing both the physical and mental energies. Diseases of the respiratory organs, are the great scourge of this climate, and occasion more than one-fifth of our mortality. It is said that in New England and New York, more than forty thousand die annually of diseases of the throat and lungs. The remarkable exemption of the German people, alike in Germany and America, from pulmonary disease, is attributed, by eminent medical authority, largely to the universal habit of singing, in which they are trained from their earliest years, both at home and at school. Thus their lungs are expanded and invigorated. The broad chest is a national characteristic. There is a common but erroneous impression that only a favoured few can learn music. How is it then that every child in Germany is taught singing as regularly as reading? But facts may be found nearer home. In late examinations of all the schools in New Haven, ‘only two hundred and forty-eight children out of over six thousand were found unable to sing the scale, and one hundred and forty of these belonged to the primary grades;’ that is, out of this multitude, only one hundred and eight above the primary grades could not sing. Superintendent Parish, says: ‘A systematic course of training the voices of the little ones in the primary rooms, has been commenced. Thus far the experiment has been a complete success. Children from five to eight years of age, readily sing the scale, singly and in concert, and read from the blackboard, notes on the staff by numerals and syllables with as little hesitation as they call the letters and words of their reading lesson.’ In the Hancock School of Boston, of about one thousand girls, less than a dozen were unfitted from all causes for attaining to a fair degree of success in singing. General Eaton, the National Commissioner of Education, and Governor English, when visiting the schools in New Haven, expressed their surprise and gratification at hearing children in the primary schools, sing at sight exercises marked on the black-board by the Teacher. ‘The exercises are placed on the black-board in the presence of the scholars, and they are required to sing them once through without the aid of Teacher or instrument, and are marked accordingly.’”

FACILITIES FOR GIVING A PRACTICAL COMMERCIAL EDUCATION IN THE SCHOOLS.

One of the felt wants in our system of Public and High Schools, has been facilities for giving boys instruction in matters relating to Commercial and business transactions. That want has been supplied; and both in the High and Public School Law provision has been made for giving pupils instruction in subjects relating to Commercial education. For years this subject has received attention in Model School of Ontario, and boys have been thoroughly prepared in book-keeping and other kindred branches, so as to fit them at once for practical work in the counting-house and other departments of mercantile life. The result has been, that boys trained there, have been much sought after by merchants

and others. In the Schools generally, beyond a little theoretical book-keeping, no special attention has been hitherto paid to commercial subjects; but in the new programme of study prescribed for the Schools, pupils are required :

"1. To be practically acquainted with Compound and Conjoined Proportion, and with Commercial Arithmetic, including Practice, Percentage, Insurance, Commission, Brokerage, Purchase and Sale of Stock, Custom House Business, Assessment of Taxes and Interest.

"2. To know the definition of the various account books used. To understand the relation between Dr. and Cr., and the difference between Single and Double Entry.

"3. To know how to make original entries in the books used for this purpose, such as Invoice Book, Sales Book, Cash Book and Day Book.

"4. To be able to journalize any ordinary transaction, and to be familiar with the nature of the various accounts in the Ledger, and with the mode of conducting and closing them.

"5. To be familiar with the forms of ordinary Commercial paper, such as Promissory Notes, Drafts, Receipts for the payment of money, &c.

"6. In the English Course for the High Schools, pupils are required to be acquainted with Commercial forms and usages, and with practical Telegraphy."

VI.—PROVIDING ADEQUATE SCHOOL ACCOMMODATION.

1. The new School Act very properly declares that Trustees "shall provide adequate accommodations for all the children of school age [*i.e.*, between the ages of five and twenty-one years, resident] in their school division." (*i.e.*, school section, city, town, or village.) [It also provides that "no school section shall be formed which shall contain less than fifty resident children, between the ages of 5 and 16 years, unless the area of such section shall contain more than four square miles." These "accommodations," to be adequate, should include (as prescribed by the special regulations)—

(1.) A site of an acre in extent, but not less than half an acre.*

(2.) A school-house (with separate rooms, where the number of pupils exceeds fifty), the walls of which shall not be less than ten feet high in the clear, and which shall not contain less than nine square feet on the floor for each child in attendance, so as to allow an area in each room, for at least one hundred cubic feet of air for each child.† It shall also be sufficiently warmed and ventilated, and the premises properly drained.

(3.) A sufficient fence or paling round the school premises.

(4.) A play-ground, or other satisfactory provision for physical exercise, within the fences, and off the road.

(5.) A well, or other means of procuring water for the school.

(6.) Proper and separate offices for both sexes, at some little distance from the school-house, and suitably enclosed.

(7.) Suitable school furniture and apparatus, viz. : desks, seats, blackboards, maps, library, presses and books, etc., necessary for the efficient conduct of the school.

2. In his official visitations to the schools, the Inspector is required to inquire into the tenure of the property; the materials, dimensions, and plan of the building; its condition; when erected; with what funds built; how lighted, warmed, and ventilated; if any class rooms are provided for the separate instruction of part of the children; if there is a lobby, or closet, for hats, cloaks, bonnets, book-presses, &c.; how the desks and

* *Size of School Grounds.*—The school grounds, wherever practicable, should, in the rural sections, embrace an acre in extent, and not less than half an acre, so as to allow the school-house to be set well back from the road, and furnish play-grounds within the fences. A convenient form for school grounds will be found to be an area of ten rods front by sixteen rods deep, with the school-house set back four or six rods from the road. The grounds should be strongly fenced, the yards and outhouses in the rear of the school, house being invariably separated by a high and tight board fence; the front grounds being planted with shade trees and shrubs. For a small school, an area of eight rods front by ten rods deep may be sufficient, the school-house being set back four rods from the front.

† Thus, for instance, a room for fifty children would require space for 5,000 cubic feet of air. This would be equal to a cube of the following dimensions in feet, viz. : 25 × 20 × 10, which is equivalent to a room 25 feet long by 20 wide and 10 feet high.

seats are arranged and constructed ; what arrangements for the teacher ; what play-ground is provided ; what gymnastic apparatus (if any) ; whether there be a well, and proper conveniences for private purposes ; and if the premises are fenced or open on the street or road ; if shade trees and any shrubs or flowers are planted.

3. In his inquiries in these matters, the Inspector is especially directed to see whether the law and regulations have been complied with in regard to the following matters : (should he discover remissness in any of them, he is directed to call the attention of the trustees to it, before withholding the school fund from the section, with a view to its remedy before his next half-yearly visit) :—

(1.) *Size of Section.*—As to the size of the school section, as prescribed by the fifteenth section of the School Law of 1871.

(2.) *School Accommodation.*—Whether the trustees have provided “adequate accommodation for all children of school age [i.e., between the ages of five and twenty-one years, resident] in their school division,” [i.e., school section, city, town, or village], as required by the second section of the School Act of 1871.

(3.) *Space for air.*—Whether the required space of nine square feet for each pupil, and the average space of one hundred cubic feet of air for each child have been allowed in the construction of the school house and its class-rooms.

(4.) *Well ; Proper Conveniences.*—Whether a well or other means of procuring water is provided ; also, whether there are proper conveniences for private purposes of both sexes on the premises.

4. The Trustees having made such provision relative to the School-house and its appendages, as are required by the fourth clause of the twenty-seventh section, and the seventh clause of the seventy-ninth section of the Consolidated School Act, and as provided in regulation 9 of the “Duties of Trustees,” it is made by the Regulation, the duty of the Master to give strict attention to the proper ventilation and temperature,* as well as to the cleanliness of the School-house ; he shall also prescribe such rules for the use of the yard and out-buildings connected with the School-house, as will insure their being kept in a neat and proper condition ; and he shall be held responsible for any want of cleanliness about the premises. He is also required to see that the yards, sheds, privies, and other out-buildings are kept in order, and that the School-house and premises are locked at all proper times ; and that all deposits of sweepings, from rooms or yards, are removed from the premises.

PROCEEDINGS IN OTHER COUNTRIES IN REGARD TO SCHOOL ACCOMMODATION.

1. In England “the (Parliamentary) Grant is withheld altogether.—If the school be not in a building certified by the Inspector, to be healthy, properly lighted, drained and ventilated, supplied with offices, and containing in the principal school-room at least 80 cubical feet of internal area per each child in average attendance.”

2. In the N. Y. State Report for 1868, we learn that : “In regard to the changes made in the School-houses of Onondago County, four districts, after being notified that their School-houses would be condemned as unfit for school purposes, unless soon repaired or new ones built, have gone to work with a good will, and now have, in each of these districts, houses which are ornaments and an honour to the men whose influence and steady toiling caused the old unfit habitations to give place to the new.”

3. In Section 29 of the New School Act for Nova Scotia, (many details of which are copied from our Acts) passed in May, 1871, the following are the provisions, in regard to School Accommodation. They are even more comprehensive and minute than ours :—

“The school accommodation to be provided by the district [school section] shall, as far as possible, be in accordance with the following arrangements :—

“For a district having fifty pupils or under, a house with comfortable sittings, with one teacher.

* NOTE.—*Temperature.*—In winter the temperature during the first school hour in the forenoon or afternoon should not exceed 70°, nor 66° during the rest of the day.

"For a district having from fifty to eighty pupils, a house with comfortable sittings and a good class-room, with one teacher and an assistant. *

"For a district having from eighty to one hundred pupils, a house with comfortable sittings and two good class-rooms, with one teacher and two assistants, or a house having two apartments, one for an elementary and one for an advanced department, with two teachers: Or if one commodious building cannot be secured, two houses may be provided in different parts of the district, with a teacher in each, one being devoted to the younger children, and the other to the more advanced.

"For a district having from one hundred to one hundred and fifty pupils, a house with two adequate apartments, one for an elementary and one for an advanced department, and a good class-room accessible to both; with two teachers, and, if necessary, an assistant; or if the district be long and narrow, three houses may be provided, two for elementary departments, and one for an advanced department, the former being located towards the extremes of the district, and the latter at or near the centre.

"For a district having from one hundred and fifty to two hundred pupils, a house with three apartments, one for an elementary, one for an advanced, and one for a High School, and at least one good class-room common to the two latter, with three teachers, and, if necessary, an assistant; or if necessary, schools may be provided for the different departments in different parts of the district.

"And generally, for any district having two hundred pupils and upwards, a house or houses with sufficient accommodation for different grades of elementary and advanced schools, so that in districts having six hundred pupils and upwards, the ratio of pupils in the elementary, advanced and High School departments, shall be respectively about eight, three, and one."

4. In Nova Scotia, the Board of School Examiners appointed for each district by the Governor in Council, is authorized by law "To declare upon the Inspector's report, or upon other reliable information, the School-house, or houses or buildings used as such, unfit for school purposes, and shall forward such declaration to the trustees of the section, and the Board shall thereafter withhold all Provincial aid from any such section, if measures are not adopted whereby a suitable house or houses may be provided, according to the ability of the section." From the regulations of the Council of Public Instruction on this subject, we make the following extracts:—"As to the size and commodiousness of the building, provision should be made for one-quarter of the population of the section; and whatever that number may be, the School-house should be of such capacity as to furnish to each scholar at least 150 cubic feet of pure atmospheric air, or seven square feet of superficial area, with ceiling running from 13 to 16 feet in height.

"The American mode of arranging the seats in School-houses is now almost unanimously admitted to be the best (see plans). By this plan the teacher is enabled to have his eye upon every pupil, and every pupil to have his eye upon the teacher. According to this method, and allowing for the length either 6 or 8 feet for entrance hall, 4 to 5 feet for teacher's platform, 4 to 5 feet between the platform and desks, and 2 feet 6 or 9 inches (according to the size of pupils) for each desk and seat together, and allowing 2 feet for the aisles, from 3 feet 6 inches to 4 feet, in graded schools, for each desk, and at least two feet for divisions between rows of desks, the following divisions will furnish accommodation for the number of scholars prefixed:—

"Plans. }	24 scholars, 26 × 21 clear, 6 feet hall, 3 rows of desks.
"No. 1. }	30 " 29 × 21 " " " "
	36 " 32 × 21 " " " "

"No. 2, 46 " 35 × 26 " 8 feet hall, with single desks at sides, and three rows of graded desks in centre.

"No 3. 56 scholars, 40 × 27 clear, with class-room.

* NOTE. The School law in Nova Scotia is identical with our Regulations on this subject—that for every fifty pupils there shall be an assistant teacher. Referring to this provision, Dr. Fraser, (Bishop of Manchester,) in his Report says:—"It is generally agreed in America that 50 scholars is the maximum number that can safely be committed to one teacher, though in carefully graded schools teachers are frequently found in charge of more."

"Adding 2 feet 9 inches to the length for every additional row of desks. Where the number of scholars amount to upwards of fifty, there should be a class-room attached.

"Plans of School-houses have been issued by the Council of Public Instruction, and the requirements of the Act are so explicit as to be a sufficient guide to Boards of Trustees."

5. In Prince Edward Island the law declares that, "Every School-house hereafter to be erected and used as such, within any district now or hereafter established under this Act, and not already contracted to be built, shall not be less in clear area than four hundred square feet, nor in the height of post than ten feet clear between the floor and ceiling, or be built nearer to the highway than ten yards."

6. In Victoria (Australia) no School receives aid from the Central Board unless the following (among other conditions) be complied with, viz:—"That in the new case of new buildings the School-room contain not less than eight square feet for each child in average attendance, and that the walls be not less than ten feet in height to the eaves; that in all cases the School-room be sufficiently warmed, ventilated and drained; that there be proper and separate offices for both sexes; that there be a play-ground attached, or other satisfactory provision made for physical exercise; and that the School be properly provided with the amount of school-furniture and apparatus, viz.: desks, forms, blackboards, maps, books, &c., necessary for the efficient conduct of such School."

7. In South Australia "grants in aid are allowed towards the cost of building School-houses, to an amount not exceeding two hundred pounds for each School. The conditions to be observed in order to obtain this assistance are, that a declaration must be made by the trustees that the building for which the grant is conceded shall be used for Public School purposes, and no other, without our written assent; that the area shall not be less than 600 square feet; that the building shall be substantially constructed, and composed of good material; and that it shall be properly furnished with the usual appliances for teaching.

"Approved plans and specifications for the building of District School-houses are supplied by us for the guidance of the promoters; but a departure from the plans is allowed if sufficient reason be shown for it."

8. In Sweden a piece of land, from one to twelve acres, is attached to each School for the benefit of the teacher and the pupils. In 1867, the number of Schools possessing such a piece of land for working was 2,016. In Norway the School Districts must, in addition to salary, furnish the teacher with a dwelling-house, with land enough to pasture at least two cows, and lay out a small garden.

VII.—SUPERSEDING SCHOOL SECTION DIVISIONS, AND ESTABLISHING TOWNSHIP BOARDS OF EDUCATION.

Ever since 1850, there has been a provision in the School Acts for the establishment of Township Boards, as contained in the thirty-second section of the Consolidated School Act; but by the unfortunate wording of that section, no such Board could be established without a majority of votes in every single School section of the township. It has occurred that out of twenty School Sections in a township, the majority of the rate-payers in *nineteen* of them voted for the establishment of a Township Board, but the majority in *one* section voted against it, and thus defeated the wishes of the nineteen-twentieths of the rate-payers. Under these circumstances, the thirty-second section of the School Act has remained a dead letter for twenty years, and no fair means have existed as yet to give it a trial, though a large majority of the County School Conventions, on two occasions, have voted to do so. It is therefore proposed in the Act to leave it to the municipal council of each township, when the circumstances and opinions of competent persons in any township may render it desirable to form such township into one School municipality, under one Board of Trustees, as is the case in cities, towns and villages, doing away with the inconvenience of separate School section divisions and rates, and leaving parents to send their children to the nearest School.

TOWNSHIP BOARDS IN VARIOUS AMERICAN STATES.

1. After long trying the School section system, Massachusetts, Pennsylvania, Ohio, Iowa,

Wisconsin and other States, have adopted the Township Board system, and pronounce it immensely superior to the School section system. In the State of New York, a compromise system is authorized by the School law; that is, one or more districts (school sections) can "either severally or jointly resolve themselves into Union Free School districts, with Boards of Education, having authority to grade and classify the Schools under their charge." From the report of the Superintendent of Public Instruction for 1870 we learn that there are now 250 such united districts in the State; of them he says: "Having had frequent occasion to examine the provisions of this law (*i. e.* the "Union Free School Act"), and being somewhat familiar with its workings, I am of the opinion that it is the best School system yet devised for all localities where the number of scholars, as in villages, is sufficient to admit of a thorough classification." Dr. Fraser, in his Report to the English Commissioners, says:—"In the State of New York, Union Schools [or united sections] appear to be the most popular and flourishing of all the rural Schools." In this Province, the township council, if the experiment should not prove satisfactory, can at any time, repeal its own by-law establishing such Board.

2. The Secretary to the State Board of Education in Connecticut, thus graphically illustrates the comparative effects of the adoption of the Township over the School Section system in that State. In order to understand the facts as stated, we have found it necessary to change the words "town" to *township*, and "district" to *School Section*, where they occur.

"The tendency to manage Schools Township-wise, is growing. More Townships united their School Sections last year than in any former one. *Once united they stay so.* At least there is no instance where a Township has taken this step and after grading any of its Schools, gone back to the School Section plan. Let public sentiment advance as it has done for five years, and the School Section system will soon be abandoned.—Nearly all the friction in the Free School plan comes from the difficulty in getting the new engine into gear with the rusty cog-wheels of the old and worn out machine. They make poor partners as would the locomotive and the "one-horse shay." The people are fast learning the economy and efficiency of the Township system. They see that it favours the wise expenditure of the public money, gains better and more permanent teachers, longer schools, and helps the poorer and outlying School Sections. The Township system too lessens the frequency of tax assessments and collections. Many a house is going to decay because the funds requisite for such purposes would necessitate a Section tax. The expense of the assessment and collection of such a tax makes too large a share of the tax itself. In most of the Sections the amounts thus provided were very small. So small that it would have been wiser and more economical for the Township to pay the bills. * * * Facts on this subject are better than theories, I have, therefore, requested one of the School visitors of Branford, to describe the effects of the change in that Township. His published letter shows what they did, how they did it, what they gained by it, and why they voted almost unanimously '*not to go back.*' It will be seen that prior to the union there was much ill-feeling in regard to School matters, that the discipline was deplorable, average attendance low, and the teachers changed generally every term; under the new system the people are better satisfied.—School Committee and Teachers more permanent, Schools graded, terms lengthened, the motion made at the last annual meeting to reduce the School year from forty to thirty weeks, not receiving a single vote. The average attendance has improved twenty-five per cent. Scholarship wonderfully improved—one hundred per cent better than it was four years ago."

3. The late Horace Mann, so noted for his enlightened views on education, deprecating the District or School Section system, says:—"I consider the law authorizing Townships to divide themselves into [School Sections] *the most unfortunate on the subject of* Common Schools ever enacted in the State [of Massachusetts]. In this opinion, ex-Governor Boutwell and the eminent educationist of the same State, concurs and hopes, that the day will speedily be seen when every township in its municipal capacity will manage its schools and equalize the expenses of education."

VIII.—AUTHORIZING THE ESTABLISHMENT OF INDUSTRIAL SCHOOLS.

Although the School Law of 1850 authorized Boards of Trustees in cities, towns and villages, to establish "any kind or description of Schools" they might see fit, yet it was regarded as doubtful whether it was sufficiently comprehensive to admit the establishment of Industrial Schools. To remove this doubt, and to give effect to the wishes of many interested in the condition of the "street arabs" of our cities, towns and villages, the section of the Act authorizing the establishment of these Schools was passed, as follows:—"42. The Public School Board of each city, town and village may establish one or more Industrial Schools for otherwise neglected children, and to make all needful regulations and employ the means requisite to secure the attendance of such children, and for the support, management and discipline of such School or Schools." The third section of the Act also provides, "that refractory pupils may be, where practicable, removed to an Industrial School."

IX.—SEPARATE COURSE OF STUDY FOR THE HIGH SCHOOLS.

1. One important object of the new law was to discriminate, by a clearly defined line in the course of study, between Public and High Schools, and to prescribe a separate programme of studies for High Schools. In practice it had been found that, in the anxiety of Trustees and masters of a majority of our Grammar Schools to crowd children into the Grammar Schools, in the fallacious hope thereby to increase the grant to their Schools, they had virtually merged the Grammar into the Common School, with the nominal addition in most cases of only a little Latin and Greek. The object of the High School sections of the new Act is to put an end to this anomalous state of things, and to prescribe for each class of Schools its own legitimate work. By means of the now increased inspection of the High Schools, and the improved inspection of the Public Schools, we hope to see the work prescribed by the respective Programmes of study faithfully performed by each.

2. In point of fact, the Grammar Schools have never occupied the position which they ought to have done in the country. They were originally designed to be Classical Schools, but they were made the Schools of certain classes, rather than Classical Schools, wholly doing, or professing to do, Common School work for certain classes—thus being made and viewed as a kind of aristocratic schools, poaching upon the ground of Common School work, and being regarded as distinct from, and even antagonist to, the Common Schools, rather than supplementary to them and identical with them in the public interests. It has, therefore, been found extremely difficult to get any considerable support for them from local sources. To get support enough to exist, more than two-thirds of the Grammar School Boards have had to seek amalgamation with the Common School Boards of their localities; but this amalgamation is attended with many inconveniences and does not by any means accomplish the objects proposed. Nevertheless, it has not been deemed expedient to interfere with this amalgamation in any way, but to leave the Boards of Trustees as formerly to unite, or, when united, to dissolve the union at their pleasure. The necessity for the union does not now exist as before, since the Legislature has in effect declared that High Schools shall be provided for by local rate equally with Public Schools. It should be remembered, however, that the experience of the great cities in the neighbouring States shows, that consolidating all the Public Schools in cities and towns under one Board of Management, and that Board elected chiefly by the ratepayers, has contributed even more to the efficient support and elevation of the classical School than to that of the Public Schools.

3. In the programme of study for High Schools, prescribed under the new Act, it is especially provided that they shall be High English Schools as well as Elementary Classical Schools, and for girls as well as for boys. When it is provided in the Act that in each High School, "provision shall be made for teaching to both male and female pupils the higher branches of an English and Commercial Education, including the Natural Sciences, with special reference to Agriculture," it was clearly intended that the lower or elementary branches of an English education should not be taught in the High Schools, but in the Public Schools. It was also intended that all pupils to be eligible for admission to

the High Schools for the study of classics, as well as for higher English, must first be grounded in the elements of a sound education in their own native language, as strongly urged by the latest Royal and Parliamentary Commission on Education in England, but strangely overlooked hitherto, as little boys six and seven years of age have been put to the study of ancient and foreign languages, and left to grow up to manhood without ever having been formally taught their native tongue, or the essential elements of a practical English education. This anomaly is provided against by the new Act in the future education of Canadian youth, at least so far as the Public High Schools are concerned, and the Council of Public Instruction has prescribed, that "the subjects of examination for admission to the High Schools shall be the same as those prescribed for the *first four classes* of the Public Schools." It will be seen from the explanatory remarks preceding the programme, that some subjects of the fourth class of the Public School programme are omitted in regard to pupil candidates for the *classical course* of the High School. The examination for admission to the High School must be *on paper*, and the examination papers with the answers are to be preserved for the examination of the High School Inspector, that he may not depend wholly on the individual examination of pupils as to whether the regulations have been duly observed in the examination and admission of pupils.

4. It is to be observed also, that though pupils are eligible for promotion from the Public to the High School, after passing a satisfactory examination in the subjects of the first four classes of the former, omitting Natural History, Chemistry and Botany, for it is quite at the option of the parents or guardians of pupils, whether they shall enter the High School or not before they complete the whole programme of studies in the Public Schools when they can enter an advanced class in the High School.

5. The fundamental principle of our system of Public Instruction is, that every youth, before proceeding to the subjects of a higher English or of a classical education, shall first be grounded in the elementary subjects of a Public School education. No candidates are, therefore, eligible for admission to the High Schools except those who have manifested proficiency in the subjects of the first four classes of the Public School programme, by passing a satisfactory examination.

6. The objects and duties of the High Schools are two fold :

First, commencing with pupils who (whether educated in either a public or private school) are qualified as above, the High Schools are intended to complete a good English education, by educating pupils not only for commercial, manufacturing and agricultural pursuits, but for fulfilling with efficiency, honour and usefulness, the duties of Municipal Councillors, Legislators, and various public offices in the service of the country.

The *Second* object and duty of the High Schools (commencing also with pupils qualified as above,) is to teach the languages of Greece and Rome, of Germany and France, the Mathematics, &c., so far as to prepare youth for certain professions, and especially for the Universities, where will be completed the education of men for the learned professions, and for the Professorships in the Colleges, and Masterships in the Collegiate Institute and High Schools.

X.—COLLEGIATE INSTITUTES, OR LOCAL COLLEGES.

The High Schools having of necessity been thrown open to girls, and provision having been made in them for giving a purely English education apart from Classics, it was thought desirable to prevent the possible extinction in our Educational system of a purely Classical School which should serve as a proper link between the Public School and the University. With this view, a provision was introduced into the High School portion of the Act authorizing the establishment of Collegiate Institutes, and fixing the minimum standard to be reached, by any High School—the Trustees of which desired it to be recognized as a Collegiate Institute. This standard is the daily average attendance of at least sixty boys in Greek and Latin, and the employment, *bona fide*, of at least four masters who shall devote the whole of their time to the work of instruction in the Institute. The standard fixed is not an ideal one, but has already been surpassed by more than one of our existing High Schools. It is hoped that the establishment throughout the country of local colleges of the comparatively high standard which such institutions must reach and

maintain, in order to be recognized as such, will be a great and substantial boon to the country, and will promote in the highest degree the best interests of superior education throughout the Province.

THE STUDY OF LATIN IN COLLEGIATE INSTITUTES.

Among the many reasons which justify the provision in the new School Act, requiring an absolute daily average attendance in Collegiate Institutes of at least sixty boys in Greek and Latin, are the following which we have quoted, with the recommendations of the English Royal Commissions on the subject. In their Report of 1868 they say :—

“All the masters examined by us appear to be agreed that nothing teaches English grammar so easily or so well as Latin grammar, and next to that they would place the teaching of some other foreign grammar, such as French. The preference is given to Latin for many reasons. There is something, no doubt, in the beauty of the language itself. But the chief stress is laid on the fulness and precision of its accidence, in which no modern language can rival it. Further, it has entered so largely into English, that the meaning of a very large proportion of our words is first discovered to us on learning Latin. And to a no less degree has it entered into English literature, so that many of our classical writers are only half intelligible unless some knowledge of Latin precede the reading. Latin again is a common gateway to French, Italian and Spanish. Some teachers even maintain that French can be taught more easily in company with Latin, then by giving all the time to French alone.” * * *

In order to give force and weight to their opinions, the Commissioners state that :—

“The witnesses whom we examined on this question may be divided into three classes :—1. Schoolmasters who spoke from their own experience. 2. Professional men, who described the general education which they thought necessary as a preparation for their own professions. 3. Managers and promoters of Schools and others, who for different reasons had taken an interest in education, and had bestowed some thought on the subject.”

The following is an analysis of the opinions of these three classes of witnesses :—

1st class.—“The Schoolmasters were almost unanimous in regarding Latin as their chief educational instrument.”

2nd class.—“The representatives of the different professions, though by no means so earnest in their opinions as the Schoolmasters, still, on the whole, came to the same result. Lawyers, medical men, farmers, engineers, agreed in wishing that a certain amount of Latin should form a part of the preliminary education for their several occupations.”

3rd class.—“There was not the same unanimity among those whose acquaintance with the subject was not quite so directly practical, but the opinions expressed by some of these gentlemen require special notice.” * * *

OPINIONS IN FAVOUR OF ENGLISH VERSUS LATIN.

The Commissioners say :—“Great weight is undoubtedly due to these latter opinions, and to the arguments used in support of them. The beauty of English literature; its power to cultivate and refine the learners; the fact that French and German children were carefully instructed in their respective languages; the example of the classic nations themselves, who certainly studied their own great writers; these, and other similar arguments, were urged upon us with great force.

“Professor Seeley went still further than the other three. He was speaking chiefly of education of the second grade, [such as are High Schools,] and in that education he wished to substitute English for Latin, and exclude Latin altogether. But he means by English not grammar, but rather rhetoric. ‘English,’ he says, ‘ought not to be taught to boys as a language, but as their language; not curiously and scientifically, but artistically, practically, rhetorically. The object is to train boys in their gift of speech, to teach them to use it more freely, more skilfully, more precisely, and to admire and

“to enjoy it more when it is nobly used by great authors. The merely grammatical part should therefore be passed over lightly, the antiquarian part might be omitted altogether, the principal stress should be laid on composition.” ‘Precision, accuracy, and solidity,’ he would avowedly make secondary, and aim rather at ‘brilliancy and elegance.’ It may be admitted that Professor Seeley has rightly defined the true purpose of teaching English literature; but as Mr. Derwent Coleridge points out with much force, ‘to teach English as a study is a far more rare and difficult accomplishment than to teach Latin; and that for one man who can take a play of Shakespeare, or “Paradise Lost,” as a class book, there are ten who can carry boys very respectably through “Caesar and Virgil, whether regard be had to the language or the subject matter.”’ ‘A practical view,’ he continues, ‘must be taken of the question. The English classics must be read, and will help of themselves to educate the reader; but a *scholarly* acquaintance with the English language, of the humblest kind, can be most quickly, as well as most thoroughly, gained through the medium of Latin.’ * *

“In particular, Mr. Goldwin Smith urged the necessity of maintaining such a connection, as in his judgment a powerful argument in favour of basing education generally upon Latin. * * *

“The best mode of dealing with Latin is probably not far from that suggested by Mr. Fearon. If boys were not allowed to begin Latin till the elements of an English education were thoroughly secured, if it were then kept within such limits as not to encroach on other subjects, but give them aid, it would probably have its full educational value at the time, and prepare the way for a higher grade of education afterwards, if a higher grade were intended.” * * *

CONCLUSIONS AND RECOMMENDATIONS OF THE COMMISSIONERS.

“The conclusions to which we were brought by a review of the opinions put before us in regard to the subjects of instruction are strongly confirmed by the experience of those countries that have been most successful in the management of education. Everywhere we find the classics still regarded as the best instrument now to be obtained for the highest education, and when the classics are neglected, the education seems to be lowered in character. But we see also that two important modifications must be made in this general statement.

“One is, that the time given to classics must be so far curtailed, if necessary, as to admit of other important studies by their side. France curtails the study of Greek for this purpose; Prussia the practice of composition; but neither gives up the classics in her highest education, nor Latin even in what ranks much below the highest. The Scotch parents, who can choose at their own discretion, still make Latin the staple of instruction, while they are not content with Latin only. Even Zurich, with a decided leaning to industrial education, has a large proportion of scholars in classical schools. But all these countries appear to stand above us in the teaching of every subject except the classics, and England is quite alone in requiring no systematic study of the mother tongue.

“The other modification of the general rule in favour of classics is that room must be made for Schools of an altogether different type. There are minds fitted to be developed by other studies than that of the most perfect known languages. There are occupations for which classical studies do not give the proper preparation. Schools like the *Rea'schulen* of Prussia, or the Schools of Industry of Switzerland, have become a positive need of modern times.”

XI.—SUPPORT EQUALLY OF THE HIGH AND PUBLIC SCHOOLS BY MUNICIPAL COUNCILS.

The School Law of 1871 at length embodies a principle for which I had contended for years. In submitting the first draft of Bill in 1854, for the improvement of our Grammar Schools, I sought to get inserted in it a recognition of the principle—which has at length been conceded—that it was the duty of the County or other Municipal Councils, to provide by rate upon property for the support of the Grammar School equally with the

Common School. Experience has shown how utterly impossible it was to maintain a good Grammar School without Municipal aid, in addition to the Legislative grant. The history of our Grammar Schools since 1854 has (with some honourable exceptions) been a chronicle of failures, owing chiefly to want of means to employ a sufficient number of teachers, and to prevent the wholesale thrusting into them of a number of ill-qualified children, in the vain hope of thereby increasing the Government grant. The obvious fact was overlooked that if one School resorted to this improper means of swelling its average attendance, another would do the same. Thus in the race for numbers the quality deteriorated, and the ratio of apportionment to each school was largely reduced. This was the case, especially as regards the better class of schools, which did not resort to this questionable means of obtaining, as was hoped, an increased grant, but which were made to suffer severely by this unjust competition. Happily the motive for a continuance of this unfortunate state of things has been entirely removed, and the Councils are now authorized and required by law to provide all necessary means for carrying on our High Schools in a state of efficiency. I have no doubt that the High School sections of the Act will inaugurate a new and auspicious era in the higher English and commercial, as well as elementary classical education of the country, in regard to both sexes of our youthful population.

XII.—THE NEW PRINCIPLE OF "PAYMENT BY RESULTS."

Our School Law of 1871 has introduced a new principle into the mode of payments to High Schools. Formerly the system adopted was (as in the case of Public Schools,) to distribute the High School Fund on the basis of average attendance of the pupils at the school. This was found to work injuriously to the best class of schools. For instance, a very inferior school with an average attendance, say, of fifty, would be entitled to receive precisely the same apportionment as another school with the same attendance, but which might be greatly superior,—if not the very best school in the Province. To remedy this defect and remove this injustice, a new principle of payment was introduced into the Act—viz: the payment, (as it is technically termed in England) "*by results*," or, as in the words of the Act itself, according to "proficiency in the various branches of study." This principle has been for years strictly applied to Elementary Schools in England, and it is now extended to other classes of schools. The thoroughness of the system of inspection adopted there has enabled the school authorities to do so. We shall not be able at present to go further than the High Schools with the application of this principle; but we trust that by and by if it be found to work well in the High Schools, we shall be able to apply it to the Public Schools as well.

In Victoria, (Australia,) "payment by results," to the schools, is the system adopted. In the last report of the Board of Education for that country published this year, the Board says: "The system of 'payment by results,' now in use, appears to be working well, and "to give general satisfaction. The fact, that at each examination, each school's force is "recorded as having gained a certain percentage of a possible maximum, affords a means "of comparison between different schools which, if not conclusive as to their relative "merits, is sufficiently so to cause considerable emulation amongst teachers. Indeed, the "wish to obtain a high percentage, materially increases the stimulus afforded by the 'result payments.'"

The three-fold principle upon which High Schools are hereafter to be aided, is declared by the new law to be as follows:

"Each High School conducted according to law [and the regulations,] shall be entitled to an apportionment * * * according—

First—"To the average attendance of pupils.

Second—"Their proficiency in the various branches of study.

Third—"The length of time each such High School is kept open as compared with "other High Schools."

With the aid of the additional Inspector of High Schools, the Department will be enabled to obtain the information required, which will enable it to give effect to the new and equitable system of apportionment.

XIII.—MORE THOROUGH AND SYSTEMATIC INSPECTION OF THE SCHOOLS.

It has been well said by Dr. Fraser, the present Bishop of Manchester, that *inspection is the salt of elementary education*. He goes on to insist upon its application to the higher schools of England, and says: "The publicity with which 'all material facts' relating to each school 'are annually made known to the State,' through the machinery of the Board of Education, is considered in Massachusetts to be the secret of the immense progress that has taken place in education in that commonwealth in the last 30 years."

EXAMPLES AND WARNINGS OF OTHER COUNTRIES.

1. In all educating countries, the *thorough inspection* of schools is regarded as *essential* to their efficiency and improvement; and this cannot be done except by men who are competent to *teach* the schools themselves. The want of practical and *thorough inspection* has undoubtedly been a serious impediment to any improvement in the schools in many parts of the Province; nor can any improvement be expected in the schools generally without an improved system of inspection. It is an anomaly in our school system, on which I have remarked more than once, that while a legal standard of qualification is prescribed for teachers of schools, no standard of qualification whatever had been prescribed for the Superintendents of teachers and schools. In the efforts which have hitherto been directed to organize the machinery of the School System, and to provide the apparatus necessary to render it effective, the people of the country have most nobly co-operated and done their part in bringing the whole system into efficient operation. But as long as the inspection of the schools was in the hands of men who were not paid or expected to devote their studies and time to the duties of their office, and who, for the most part, were not practical teachers, and who formed their standard of good schools and good teaching from what existed twenty or thirty years ago, and not from what the best schools have been made, and the improved methods of school organization, teaching and discipline which have been introduced during the present age, we could not expect any considerable improvement in the internal state and character of the schools, except from the improved character of the teachers, and in instances where regularly trained teachers, or teachers who have kept with the progress of the times, have been employed; and even they have been able to do little in comparison with what they might have done, had their hands been strengthened and their hearts encouraged by the example, counsel and influence of thoroughly competent Inspectors.

2. As to the felt necessity of a better system of School Inspection in Ontario, we have the testimony of the present Bishop of Manchester, who, in 1865, visited the Province, and made his Report to the English Commissioners upon our schools. He remarks:—

"Thorough inspection of schools, such as we are accustomed to in England, is a great desideratum both in the States and Canada (page 8). * * * Something like our English mode of inspection of schools, by a body of perfectly independent and competent gentlemen, would be a great and valuable addition to the school system both of the United States and Canada. * * * In fact, the great desideratum of the Common School system, both in Massachusetts and generally in the States, is *adequate, thorough, impartial, independent inspection of schools*. In New York and Pennsylvania, a system of supervision by counties or wide districts has been introduced, and is at work with tolerable success; but even here, the Superintendents (or Commissioners, as they are called in New York) appear, from their reports, to be more or less hampered by local prejudices and jealousies, and their salary is in part provided by the district which is the sphere of their labours. They are elected, too, in Pennsylvania, by the 'school directors' of the several townships; in New York, by the electors of the assembly districts, by ballot. A similar organization is strongly recommended by the Ohio State Commission. * * * The agent of the Massachusetts Board of Education, in a lecture, says:—'My observations, on visiting thousands of schools throughout Massachusetts, and many in twelve other States, have clearly proved to my mind the wisdom of maintaining a Superintendent in all our cities and large townships, who shall devote his whole time to the care and improvement of the schools.'" (Page 25.) In discussing the defects in the Administration

of Schools in the United States. Dr. Fraser says: "The supreme control of the schools is too absolutely in the hands of local administrators, *with no absolute guarantee of competency*. The inspection, even, of County Superintendents and Commissioners is often found to be nugatory and ineffective. Legal requirements are constantly ignored or evaded, and a properly authenticated and *independent* officer, like Her Majesty's Inspector of Schools among ourselves, armed with visitatorial powers, and with means provided for giving effect to his recommendations, appears to be the element wanting in the machinery of the system, to give it that balance which the complication of its parts requires." (Pages 61, 62.)

3. The English Commissioners, in their report of 1861, declare that,—

"The superiority of inspected schools may be stated as beyond dispute; and though this is partly attributable to inspected schools possessing an apparatus of trained teachers and pupil teachers, which in other schools is unknown, yet much is due to the activity and carefulness which are the results of a system of constant supervision. This is clearly expressed by Mr. Hare, who examined a large number of witnesses, and who assures us that 'on the beneficial effects of inspection, especially as carried on by Her Majesty's Inspectors, the agreement is more general than on any other subject. Nearly all consider it as a wholesome stimulus to all concerned—managers, parents, pupil-teachers, and scholars.'"

"The great advantages of inspection appear still more clearly, if we examine the opinions which have been sent to us from different parts of the country. Thus the Hon. and Rev. T. Best, after criticising as 'faulty' several details of the Government system of aid, speaks thus:—"Having dwelt thus long on the deficiencies of the system, let me make amends in a single sentence. The schools under Government inspection are, as a rule, *'the only good schools in the country,* and we cannot too highly appreciate the assistance *'the system renders and has rendered.'*"

"We have strong testimony to the marked superiority of inspected over uninspected schools, and to the stimulus which inspection supplies, subject to the remark that the Inspectors often lead the teachers to dwell on matters of memory, rather than of reasoning, and rather on details than on general principles, or on general results, and also subject to a further remark, as to the inconvenience of differences in the standards adopted by different Inspectors. As a remedy for these defects, we recommend the appointment by the Committee of Council of one or more Inspectors General, whose duty it shall be to superintend the Inspectors, to notice their deficiencies, and to correspond on the subject directly with the Committee of Council. We have found that while inspection quickens the intellectual activity, and raises the condition of the whole school, the Inspectors are tempted to attend to the state of the upper, more than of the junior, classes in schools, and to estimate the whole school accordingly."

4. The English Commissioners, in their report of 1868, say:—

"*Even the best masters will not do so well without this aid as with it.* On the Continent all Schools that in any degree claim a public character, and sometimes even private schools, are required to submit to such a review of their work. In this country, inspection has been the most powerful instrument in the improvement of elementary education.

"* * * Inspection is necessary to prevent waste, to secure efficiency, to prepare the way for improvement. The regulations for examination should be governed by two principles. One is that the examination should not be competitive, but a fair test of average work. It should, as far as possible, follow the Prussian rule, and be such as a scholar of fair ability and proper diligence may, toward the end of his school course, come to with a quiet mind and without a painful effort."

5. Our American neighbours have thoroughly tried the systems of both Township and County Superintendents. The State Commissioner of Schools in Ohio says: "Our system of township supervision of schools has proved a lamentable failure. Similar systems in other States have uniformly failed. Any system of supervision for the country schools must necessarily fail, that does not make provision for the employment of *competent Superintendents, whose entire energies are given to the work.*" The value of local supervision, through the agency of competent County Superintendents, has been tested in other

States. Pennsylvania adopted the system in 1854, New York in 1856, Illinois, Wisconsin, Maryland, West Virginia, California, and several other States subsequently; and the testimony from each of them is, that it has proved a most valuable feature of their School System. The Superintendent of Public Instruction in Pennsylvania says: "County Superintendents were first elected in this State in 1854, and it is not claiming too much for the office to say that it has vitalized the whole system. To it, more than to any other agency, or to all other agencies combined, we owe our educational progress of late years." I may observe that more than four-fifths of the County School Conventions held in the several counties of this Province two years since, desired duly qualified County Superintendents in place of Township Superintendents.

6. The travelling agent of the Board of Education for the State of Massachusetts uses the following forcible language in regard to this matter:—

"It has been said, and with great truthfulness, that 'the most important branch of administration, as connected with education, relates to school inspection.' It is asserted 'by some careful observers, that the Dutch schoolmasters are decidedly superior to the Prussian, notwithstanding the numerous Normal Schools of Prussia, and the two or three only in Holland; and this superiority is attributed entirely to a better system of inspection. *This is the basis on which the whole fabric of their popular instruction rests.* The absence of such a thorough supervision of schools as is maintained in Holland with such admirable results, is the weakest part of our system.

"What is needed for all our schools, and what is essential to their highest efficiency, is a constant, thorough, intelligent, impartial and independent supervision. Comparatively few persons possess the varied qualifications so indispensable to success in this delicate and important work. So important was it regarded by the distinguished author of the Dutch system of inspection, that, after a long life devoted to educational labour, he said, 'Take care how you choose your Inspectors; they are men whom you ought to look for 'lantern in hand.'

"A school," says Everett, 'is not a clock, which you can wind up, and then leave it to go of itself. Nor can other interests be thus neglected. Our railroads and factories require some directing, controlling, and constantly supervising mind for their highest efficiency, and do not our schools need the same? To meet this great want, eleven of the fifteen cities of our State, and numerous large towns, have availed themselves of the provision of the Statute, and elected School Superintendents who devote their whole time and energies to this work of supervision. I have visited all, or nearly all, these towns and cities, and several of them frequently, and can bear my decided testimony to the great benefit that has resulted to their schools in consequence."

SPIRIT IN WHICH INSPECTION SHOULD BE PERFORMED.

The regulations in regard to inspection, which have been adopted by the Council of Public Instruction, are sufficiently explicit as to the general details of inspection, and the mode in which it should be conducted. I will, therefore, only repeat here what I wrote on this subject in 1846 and 1850, when our present system of education was inaugurated. I said:

"To perform the duty of Inspector with any degree of efficiency, the Inspector should be acquainted with the best modes of teaching every department of an English school, and be able to explain and exemplify them. It is, of course, the Inspector's duty to witness the modes of teaching adopted by the teacher, but he should do something more. He should, some part of the time, be an actor as well as spectator. To do so he must keep pace with the progress of the science of teaching. Every man who has to do with schools, ought to make himself master of the best modes of conducting them in all the details of arrangement, instruction, and discipline. A man commits a wrong against teachers, against children, and against the interests of school education, who seeks the office of Inspector without being qualified and able to fulfil all its functions. In respect to the manner of performing the visitatorial part of the Inspector's duties, I repeat the suggestions which I made in my circular to local Superintendents of Schools, in December, 1846. They are as follows:

"Your own inspection of the schools must be chiefly relied upon as the basis of your judgment, and the source of your information, as to the character and methods of school instruction, discipline, management, accommodations, &c.: and on this subject, we ought not to content ourselves with exterior and general facts. * * * But it is not of less importance to know the interior regime of the schools—the aptitude, the zeal, the deportment of the teachers—their relations with the pupils, the trustees and the neighbourhood—the progress and attainments of the pupils, and, in a word, the whole moral and social character and results of the instruction given, as far as can be ascertained. Such information cannot be acquired from reports and statistical tables; it can only be obtained by special visits, and by personal conversation and observation—by an examination of the several classes, in their different branches of study; so as to enable you to ascertain the degree and efficiency of the instruction imparted."

THE GREAT VALUE OF INSPECTION TO PUBLIC SCHOOLS.

"The importance of the question of Public School inspection" (remarks the *English Journal of Education*) "is much broader and deeper than at first sight appears. The history of that laborious transition which has occurred, first, from contented ignorance to discontent with ignorance, and then to strivings after intelligence, and attempts at education, fructifying in a very general effort to make schools efficient, discloses to the practical observer, one gangrenous obstacle attaching to the whole progress of the movement, viz., a morbid desire to screen and palliate defects. We believe far less hindrance to education has arisen from the badness of schools, than from the folly of cloaking their badness. This jealousy of criticism has been exhibited greatly in proportion to the reputation of the school. It has always been found that an Inspector may, with much less chance of evoking the wrath of the managers, denounce a bad school in wholesale terms than he can insinuate a blemish, or hint a blot, in one which 'has a name.' It may be said that this is very natural, as no one likes the criticism of that which has obtained him credit, and ministered to his *amour propre*: but natural as this may be, it is not the less injurious to the progress of education. The very best school is capable of improvement; and as the real value of a school is generally overrated, and its defects are more easily veiled than those of any other object of equal importance, it is greatly to be lamented that this intolerance of criticism should pit itself against the obvious means of improvement which skilled inspection affords. We repeat, that if it stops short of a full and faithful exposure of every fault and defect in the matter and methods of instruction, it betrays its trust, and falls short of its imperative duty. So far from there being ground for complaint of the censoriousness of Inspectors of Schools, whether local or governmental, proofs abound that they far oftener sin in being too mealy-mouthed, and in winking at defects they deem it ungracious or impolitic to expose. Education is by no means in need of such delicate handling. It is far from being a flame easily extinguished by the breath of censorship. On the contrary, nothing tends more directly to feed and nourish it; and Inspectors who have the manliness to set their faces against shams and rote systems, and to 'develop' errors, as well as 'aims,' in their right light, are deserving of the hearty thanks and support of every man who wishes education to be a reality, and a thorough mind-training in the duties and subjects essential for practical life. There are two ways of inspecting schools; one is to praise the teachers and please the managers; the other is to benefit the scholars and improve the schools. It will but seldom happen that those two courses can coincide. The Inspector must usually take his choice between them, and according to it is he worthy or unworthy of his office. We are no advocates of undue harshness, or a spirit of fault finding. He who takes pleasure in blaming, or who fails to apply just censure in kindly or Christian terms, is just as wrong as he who, from false lenience or truckling servility, praises where he ought to blame, or 'winks at faults he trembles to chastise.'

"We firmly believe that the progress of sound teaching is just now more entirely in the hands, and contingent on the faithfulness and courage of Inspectors of Schools, than any other human agency. None, so well as professional and experienced examiners, can detect glosses, extinguish effete systems, substitute right ones, or invert the pyramid now tottering on its apex. Those who, chafing under the wholesome correction of their own

schools, absorbed by the sense of personal grievance, and forgetting what is due to the great behests and eternal aims of education, rail at the remedy, and attack the physician instead of the disease, are the real obstructives to the cause of sound secular and availing religious instruction."

XIV.—MISCELLANEOUS PROVISIONS OF THE NEW SCHOOL ACT.

Among the miscellaneous provisions of the new School Act, we may enumerate the following :—

1. Section 16 authorizes Trustees, or any five ratepayers, to appeal to the County Council against the act, past or present, of a Township Council, in forming or altering their school section.

2. The 17th section of the new School Law provides a remedy for difficulties which have been experienced in many School sections in obtaining a site for a School-house. This provision is a simplification of what is provided by law, in similar cases, in laying out public highways. A corresponding provision exists in the new School Law of England, and the laws of Quebec, Massachusetts, Michigan, New Hampshire and elsewhere.

3. Section 20 authorizes Trustees to erect a teacher's residence, if they desire to do so.

4. Section 22 authorizes a Trustee, equally with their Secretary, to call School Trustees' meetings.

5. Sections 25 and 26 relate to the enlarged powers conferred upon Arbitrators under the School Law ; and section 27 abolishes arbitrations between Trustees and Teachers in regard to salary, &c.

6. Section 28 remedies a defect in the provision of the law in regard to appeals by the Chief Superintendent against the decisions of County Judges in School matters.

7. Section 29 declares that the summer vacations in the Public Schools shall be one month, from the 15th of July to the 15th of August, both inclusive ; and section 44 declares that the summer vacations in High Schools shall be from the 1st of July to the 15th of August, inclusive.

8. Section 30 remedies several defects, and supplies some omissions in the School Law. It facilitates the recovery of fines ; enlarges the powers of school collectors ; restores to the outgoing Trustee (after the 1st of October in each year) all the powers of which the School Law of 1860 deprived him. He has now equal authority with the other Trustees to engage teachers, &c. The section also prevents Trustees from giving orders to teachers who are not legally qualified ; authorizes the Township Council to correct mistakes in the school assessor's roll ; (Note.—The 18th section authorizes the Reeve and School Inspectors to equalize every year the assessments of union school sections.) The section further directs the Inspector to apportion moneys to every school section within his jurisdiction, whether a school is kept open in it or not. The object of this provision is,—1st. Not to allow a section to suffer a loss of its grant in case the Trustee's report should fail, from error or carelessness, or other cause, to reach the Inspector. 2nd. To determine the amount for which Trustees are personally responsible, and for which they can be sued, should they fail to keep open their school during the whole year.

9. Section 31 declares that the Municipal or Assessment Act, or any amendments to them, which shall be in force at the time anything is done under their authority, shall govern trustees, collectors, and other school officers.

10. Section 37 declares that no Public or High School shall be entitled to share in the fund applicable to it, unless conducted according to the regulations provided by law.

11. Public School Trustees, equally with their Secretary-Treasurer, are now made personally responsible (section 46) for their "neglect or refusal to account for, or deliver up, when called upon by competent authority to do so" * * * "all school moneys or school property" which may have come into their hands. They are also required "to exact security from every person to whom they may entrust school money, or other school property, and deposit such security with the Township Council for safe keeping." Failing to do so, they become personally responsible for any loss which may occur in consequence. (Sections 23 and 46.) Section 21 relates to Public School section accounts, and section 45 to the audit of the High School accounts.

CONCLUSION.

I have thus, as your Excellency will perceive, entered somewhat fully into an exposition and justification of the various new features of our system of Public Instruction, which have been embodied in the "School Law Improvement Act of 1871." I have felt it the more necessary to furnish, once for all, in this report, the many friends of our School System with the facts and reasonings illustrative of the necessity for the recent changes in our law, which influenced me in endeavouring to embody in our School Law, certain great principles which underlie and are common to every really comprehensive system of National Education. In fact, no intelligent person can carefully read over the extracts which I have given of the views and proceedings of educationists in other countries without coming to the conclusion, that, to have done less than we have done, would be to place this Province in the rear rather than abreast of other educating countries. They would have felt that I should have been recreant to my duty had I failed to strongly press upon the Government and Legislature, the necessity of giving their highest sanction to the recommendations which I had made with a view to improve the School Law of this Province—recommendations which were founded (as I have shown in this Report) upon the knowledge and experience of the most accomplished educationists of the present day.

After twenty-seven years' service in promoting what I believed to be the best interests of our School System, I am more than ever profoundly impressed with the conviction of the correctness of the views on these subjects which I expressed in my preliminary *Report on a System of Public Instruction for Upper Canada*, which I submitted to the Government in 1846. It has been the purpose and aim of my life, since I assumed the direction of the Education Department, to give practical effect to these views, and with the Divine favour, to secure and perpetuate to my native country, the inestimable blessings of a free, comprehensive, Christian education for every child in the land.

I have the honour to be,

Your Excellency's obedient, humble servant,

E. RYERSON.

DEPARTMENT OF PUBLIC INSTRUCTION,
Toronto, October, 1871.

PART II.
STATISTICAL REPORT.
1870.

TABLE A.—The Common

COUNTIES.	RECEIPTS BY LOCAL SCHOOL AUTHORITIES.					
	For Teachers' Salaries (Legislative Grant).	For Maps, Apparatus, Prizes and Libraries (Legislative Grant).	Municipal School Assessment.	Trustees' School Assessment.	Trustees' Rate Bill for Fees.	Clergy Reserve Fund, balances and other sources
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Glengarry.....	2247 00	83 15	2237 00	6662 32	382 61	2086 40
Stormont.....	1872 00	68 50	1927 00	8857 25	100 08	1328 61
Dundas.....	2087 00	46 97	2048 00	10846 66	34 55	1063 43
Prescott.....	1632 00	48 20	211 00	6468 78	8 45	1117 23
Russell.....	885 00	5 00	931 00	5273 37	...	2659 02
Carleton.....	3769 00	140 48	3237 00	18169 49	550 91	2565 83
Grenville.....	2149 00	140 00	2096 00	6312 66	365 60	3198 85
Leeds.....	3466 00	239 20	3445 00	17217 05	510 23	7145 05
Lanark.....	3364 00	329 75	3266 00	22351 41	221 17	5984 54
Renfrew.....	3107 00	77 70	2848 00	12141 86	45 73	1532 38
Frontenac.....	3514 00	152 80	2750 00	14342 02	1328 98	3426 15
Addington.....	1920 00	85 95	1912 00	8765 74	208 36	2583 12
Lennox.....	1055 00	9 00	981 00	4680 47	46 52	2087 33
Prince Edward.....	1865 00	216 00	2275 00	15291 25	1060 43	3911 26
Hastings.....	5250 00	182 63	4048 60	26382 76	226 53	5661 65
Northumberland.....	3973 90	216 86	3874 00	27207 46	109 22	5789 53
Durham.....	3406 00	385 55	3406 00	24611 91	914 20	2794 13
Peterborough.....	3372 00	105 91	3166 00	17546 84	188 65	6316 08
Victoria.....	3661 00	310 96	3580 00	20991 21	124 15	4703 84
Ontario.....	4498 00	549 89	4454 00	32014 48	355 23	7318 62
York.....	5999 00	696 44	5838 00	39643 28	1409 87	20498 67
Peel.....	2590 00	305 20	2755 00	18539 07	1403 69	7076 41
Simcoe.....	6382 00	694 06	6446 00	38928 60	698 71	6443 99
Halton.....	1991 00	358 58	2535 00	15723 73	1099 37	7137 53
Wentworth.....	3036 00	323 12	3000 00	18978 40	2668 21	8531 82
Brant.....	2124 00	156 41	2654 00	17089 84	1183 00	4570 10
Lincoln.....	2016 00	166 63	2520 00	14905 01	850 52	6943 95
Welland.....	1976 00	80 25	2545 00	15196 84	540 77	7753 27
Haldimand.....	2411 00	230 78	3016 00	17715 44	548 25	5629 67
Norfolk.....	3267 00	283 57	3314 00	23818 91	376 91	8289 76
Oxford.....	4548 00	496 69	4679 00	36516 86	553 90	11188 54
Waterloo.....	3347 00	219 78	3900 00	29363 79	557 77	8641 39
Wellington.....	5873 00	416 15	6546 00	40722 49	499 72	8374 84
Grey.....	6583 00	520 30	6849 00	42281 06	68 28	6433 41
Perth.....	7339 00	279 12	4104 00	30930 10	123 71	6989 08
Huron.....	6975 00	967 20	6796 00	46461 55	82 83	9721 47
Bruce.....	5095 00	384 66	4804 00	30811 59	47 55	8493 33
Middlesex.....	6985 00	683 75	6778 00	47038 86	917 30	14323 33
Elgin.....	3259 00	336 58	3372 00	24096 79	683 80	9855 29
Kent.....	3252 00	147 40	3097 00	28190 24	95 94	8882 64
Lambton.....	3254 00	407 75	4907 00	31866 09	27 23	14032 62
Essex.....	2426 00	196 69	2342 00	17542 44	129 83	2800 31
District of Algoma.....	460 00	15 96	.....	.....	224 50	612 95
Parry Sound.....	150 00	.....	.....	.....	.....	200 00
Total.....	148430 90	11701 57	147468 00	932498 97	21573 26	266097 42
CITIES.						
Toronto.....	4351 00	377 88	30752 10	1971 76	.....	4188 87
Hamilton.....	1978 00	132 70	22598 60	907 05	7265 71	564 94
Kingston.....	1286 00	73 50	8800 00	1098 09	175 38	6 31
London.....	1490 00	165 00	11060 00	645 33	.....	7444 17
Ottawa.....	1540 00	57 50	11060 00	2983 75	491 47	11345 11
Total.....	10645 00	806 58	84150 70	7605 98	7932 56	23549 40

NOTE.—Tables A. B. C. D. E. contain the Statistics of
76

Schools of Ontario.

EXPENDITURE BY LOCAL SCHOOL AUTHORITIES.

Total Receipts for all Com. School purposes during 1870.	For Teachers' Salaries.	For Maps, Apparatus, Prizes and Libraries, including 100 per cent.	For Sites and Building School Houses.	For Rents and Repairs of School Houses.	For School Books, Stationery, Fuel and other expenses.	Total Expenditure for all Common School purposes during 1870.	Balances.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
13698 48	10638 60	185 20	228 61	175 81	1074 39	12302 61	1395 87
14153 44	10208 03	137 00	1061 05	245 40	991 99	12643 47	1510 07
16126 61	11036 30	93 94	2097 86	403 14	1084 46	14715 70	1410 91
11464 66	6932 94	127 84	432 89	467 51	851 21	8812 39	2652 27
9753 39	4659 15	43 00	446 92	275 16	373 89	5798 12	3955 27
28432 71	20254 14	291 95	1877 90	827 82	1428 69	24680 50	3752 21
14262 11	11443 43	280 00	812 72	299 78	1401 34	14237 27	24 84
32022 53	20450 27	478 40	2152 63	662 22	3460 68	27004 20	5018 33
35516 87	21803 72	659 50	5785 06	724 91	3527 70	32500 89	3015 98
19752 67	14760 69	155 40	708 79	537 84	1810 30	17973 02	1779 65
25513 95	17563 91	305 60	2150 42	430 48	1968 22	22418 63	3095 32
15475 17	11316 92	212 45	596 77	361 54	1359 40	13847 08	1628 09
8839 32	6389 29	20 00	99 19	301 48	737 38	8047 34	811 93
24618 94	16963 77	432 00	3327 29	605 57	2748 58	24077 21	541 73
41151 57	25441 17	466 38	4204 10	813 50	2920 27	33845 42	7306 15
41170 97	29480 34	498 56	3653 81	762 20	3212 80	37607 71	3563 26
35520 79	27269 41	813 69	1018 77	1200 67	2837 82	33140 36	2380 43
30395 48	19209 93	274 19	3674 30	710 99	2626 67	26496 08	4199 40
33415 16	21385 57	709 92	3778 65	767 86	3343 58	29985 58	3429 58
49190 22	33384 75	1099 78	3318 61	1656 52	4486 69	43946 35	5200 87
74085 26	45788 13	1407 43	8410 53	2853 01	6339 70	64798 80	9286 46
32669 37	22187 28	610 40	3908 43	782 01	2442 19	29930 31	2739 06
59593 36	40822 44	1388 12	3181 47	1614 49	5270 53	52277 05	7316 31
28845 21	18067 72	725 36	5770 57	779 13	2598 57	27941 35	903 86
36537 55	24402 47	670 89	4161 28	849 10	3016 43	33100 17	3437 38
27777 35	17768 39	327 62	4033 51	409 58	2927 00	25466 10	2311 25
27402 11	17646 22	333 26	2743 24	488 70	2695 38	23906 80	3495 31
28092 13	15870 02	175 85	2631 79	752 30	3661 96	23091 92	5000 21
29551 14	19801 07	465 73	2662 01	578 31	2221 83	25728 95	3822 19
39350 15	24375 59	579 76	3360 65	1138 80	4305 43	33760 23	5589 92
57982 99	36530 91	993 38	9100 88	2169 89	3904 33	52699 39	5283 60
46029 73	30899 84	492 63	4448 29	1677 05	3162 66	40680 47	5349 26
62432 20	42363 94	918 60	6911 18	1240 33	4406 19	55840 24	6591 96
62735 05	42770 10	1039 30	4391 78	1682 67	4972 24	54856 09	7878 96
49765 01	30182 92	579 72	8233 40	3218 27	2641 79	44856 10	4908 01
70900 39	45538 99	1814 40	8019 73	1974 70	5984 22	63332 04	7612 01
49636 13	32337 68	769 32	7947 48	675 94	3288 82	45019 24	4616 89
76726 24	48961 25	1422 32	9288 94	2046 35	6388 35	68107 21	8619 03
41603 46	26888 42	673 16	5493 11	1176 35	2824 80	37058 84	4544 62
43665 22	27643 46	408 41	7343 68	1733 46	3638 24	40767 25	2897 97
54494 65	28092 29	814 42	10845 15	1828 84	5141 51	46722 21	7772 44
25436 97	18151 10	418 91	735 75	971 81	1987 11	22264 68	3172 29
1313 41	797 61	45 93	.....	20 00	176 53	1040 07	273 34
350 00	200 00	.....	.....	.....	.....	200 00	150 00
1527770 12	999180 17	24159 72	165052 19	42891 49	126241 87	1357525 44	170244 68
41641 61	22681 10	1701 54	.....	3149 64	9625 45	37157 73	4483 88
33447 10	19147 79	2517 34	4746 09	1342 93	5256 24	33020 39	426 61
11439 28	7329 19	262 26	237 36	816 84	2698 62	11404 27	35 01
20744 50	8837 41	330 00	1675 00	913 71	1821 14	13577 26	7167 24
27417 83	12469 42	132 50	3215 69	1724 00	4681 09	22222 70	5195 13
134690 22	70464 91	4943 64	9934 14	7947 12	24092 54	117382 35	17307 87

Separate Schools incorporated with those of Common Schools.

TABLE A.—The Common Schools

TOWNS.	RECEIPTS BY LOCAL SCHOOL AUTHORITIES.					
	For Teachers' Salaries (Legislative Grant).	For Maps, Apparatus, Prizes and Libraries (Legislative Grant).	Municipal School Assessment.	Trustees' School Assessment.	Trustees' Rate Bill for Fees.	Clergy Fund, balances and other sources
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Amherstburgh.....	235 00	43 00	1470 00	1056 00		89 18
Barrie.....	229 00	38 10	1537 00	284 00		170 17
Belleville.....	656 00	45 77	6729 32	1039 93		947 67
Berlin.....	276 00		2115 20	284 19	43 62	345 27
Bothwell.....	130 00	20 00	1337 48			315 80
Bowmanville.....	270 00	38 00	1830 00		774 10	235 79
Brantford.....	705 00	75 00	8500 00	356 04	1111 90	3144 93
Brockville.....	415 00	75 00	3988 00	397 79		2003 65
Chatham.....	445 00	5 00	1299 68			3121 40
Clifton.....	145 00		1200 00	105 00	104 00	1012 61
Cobourg.....	431 00		2700 00	186 00	0 78	1140 51
Collingwood.....	198 00	12 50	1991 45			58 05
Cornwall.....	191 00	20 25	1250 00			634 00
Dundas.....	303 00	12 00	896 00	382 99	794 33	565 38
Galt.....	360 00	65 08	3775 00		20 00	1786 37
Goderich.....	350 00	60 00	5525 00			512 46
Guelph.....	575 00	90 32	3362 20	373 30	1579 66	425 67
Ingersoll.....	329 00	15 00	2100 00	288 50	1152 28	1013 61
Lindsay.....	281 00	182 63	2265 43	799 34		2062 62
Milton.....	97 00	61 00	327 79	99 00	3 75	662 39
Napanee.....	223 00		1100 00	74 00	56 09	112 51
Niagara.....	183 00		987 71	305 72	15 75	477 72
Oakville.....	172 00		1160 16	147 25	11 72	99 65
Owen Sound.....	306 00	30 00	2646 58			709 66
Paris.....	263 00		2062 53	175 33	26 87	163 63
Perth.....	244 00	59 47	720 00	469 25		2083 15
Peterborough.....	416 00		615 00		1150 96	5572 40
Pictou.....	223 00	28 00	1300 00	246 19	13 87	838 46
Port Hope.....	400 00		2386 62		1760 05	411 64
Prescott.....	231 00	40 00	1225 38		691 75	799 99
Sandwich.....	144 00	12 00	1398 80			337 66
Sarnia.....	234 00	44 00	3910 24		721 54	443 92
St. Catharines.....	726 00	9 20	8100 00	1251 41		2804 78
St. Mary's.....	341 00	60 00	1000 00			1834 46
St. Thomas.....	180 00		1400 00		621 00	282 82
Simcoe.....	164 00	78 50	1366 76	60 00		93 57
Stratford.....	332 00	15 00	400 00		8 00	2954 42
Whitby.....	296 00		2819 21	130 33		214 22
Windsor.....	350 00	104 62	4184 25			775 76
Woodstock.....	396 00		3500 00		1196 34	429 00
Total.....	12445 00	1339 46	96482 19	8511 56	11858 36	41686 95
VILLAGES.						
Arnprior.....	140 00	25 00	1155 00		199 50	657 26
Ashburnham.....	120 00		320 00		267 75	124 58
Aurora.....	129 00		770 00			183 03
Bath.....	60 00		525 00		5 50	257 33
Bradford.....	120 00		895 00			12 04
Brampton.....	176 00	30 00	1675 00			198 04
Brighton.....	122 00		178 00			942 10
Caledonia.....	108 00		450 00		333 91	75 28
Cayuga.....	86 00		631 75		10 50	54 76
Chippawa.....	142 00		754 65	104 65		
Clinton.....	176 00		1500 00			6157 47
Colborne.....	86 00	7 00	750 00			31 90
Dunnville.....	160 00		1300 00			3419 71
Elora.....	191 00		1434 95	134 95	11 50	417 33

of Ontario.—Continued.

EXPENDITURE BY LOCAL SCHOOL AUTHORITIES.							
Total Receipts for all Com. School purposes during 1870.	For Teachers' Salaries.	For Maps, Apparatus, Prizes and Libraries, including 100 per cent.	For Sites and Building School Houses.	For Rents and Repairs of School Houses.	For School Books, Stationery, Fuel and other expenses.	Total Expenditure for all Common School purposes during 1870.	Balances.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
2893 18	2141 00	156 90		160 51	159 04	2617 45	275 73
2258 27	1546 81	155 13		115 00	303 09	2120 03	138 24
9418 69	5311 10	91 54		1096 47	1430 33	7929 41	1489 25
3064 28	2776 53	111 26			159 05	3046 84	17 44
1803 28	1232 67	69 08		59 13	182 21	1543 09	260 19
3147 89	2011 00	76 50		100 00	627 37	2814 87	333 02
13892 87	6929 43	151 50	1971 51	528 94	1570 78	11155 16	2737 71
6879 44	3430 89	150 00		163 25	764 91	4509 05	2370 39
4871 08	3106 60	13 00	650 00	146 90	560 00	4176 50	394 58
2566 61	1345 00			27 16	276 41	1648 57	918 04
4458 29	3000 00	90 00	541 80	286 39	497 92	4416 11	42 18
2260 00	1320 00	32 50	347 24	190 05	317 16	2206 95	53 05
2095 25	1088 25	40 50			260 67	1389 42	705 83
2953 70	2083 81	78 37		32 35	759 17	2953 70	
6006 45	3265 55	195 99		127 56	784 72	4373 82	1632 63
6447 46	3101 55	140 00	1795 47	150 14	1256 30	6447 46	
6406 15	4411 65	180 64		587 93	1171 01	6351 23	54 92
4898 39	2744 58	112 70	430 15	125 83	991 76	4405 02	493 37
5591 04	2850 98	365 30		100 98	760 07	4077 33	1513 71
1250 93	925 00	122 00		9 03	65 10	1121 13	129 80
1565 60	1230 20	4 58		114 37	203 77	1552 92	12 68
1969 90	1570 53	13 00			242 15	1825 68	144 22
1590 78	1250 00	4 50		79 46	254 53	1588 49	2 29
3692 24	2290 00	60 00	167 48	135 03	674 27	3326 78	365 46
2691 36	2005 00			44 69	540 58	2590 27	101 09
3575 87	1840 00	118 94		457 62	340 41	2756 97	818 90
7754 36	3311 49		2580 00	340 00	790 76	7022 25	732 11
2649 52	1248 00	56 63		65 77	292 82	1663 22	986 30
4957 71	3095 00			19 63	534 15	3648 78	1308 93
2988 12	1392 00	80 00		54 25	416 38	1942 63	1045 49
1892 46	1382 50	24 00		81 90	130 96	1619 36	273 10
5353 70	2859 00	88 00	825 00	77 79	362 83	4212 62	1141 08
12891 39	4676 25	18 70	1849 85	379 60	1275 09	8199 49	4691 90
3235 46	2229 00	120 00		512 93	271 07	3133 00	102 46
2483 82	1749 35			20 00	457 57	2226 92	256 90
1762 83	1256 05	157 00			349 78	1762 83	
3709 42	2556 00	65 00		47 35	558 83	3227 18	482 24
3459 76	2173 55	18 00		405 35	398 02	2992 92	466 84
5414 63	3116 00	209 24		847 86	761 73	4934 83	479 80
5521 34	2824 99			192 23	1215 18	4232 40	1288 94
172323 52	98677 31	3373 50	11158 50	7883 45	22969 95	144062 71	28260 81
2176 76	975 33	50 00		50 77	399 37	1475 47	701 29
832 33	640 00			13 75	21 75	675 50	156 83
1082 03	743 39			35 84	146 73	925 96	156 07
847 83	590 50			13 12	241 21	847 83	
1027 04	770 00		12 50	31 68	140 05	954 23	72 81
2079 04	1150 00	60 00		25 37	708 53	1943 90	135 14
1242 10	787 16			31 67	135 15	953 98	288 12
967 19	650 00	10 00		16 00	116 92	792 92	174 27
783 01	556 00			70 60	134 75	761 35	21 66
1001 30	756 75			30 00	209 90	996 65	4 65
7833 47	1170 00	3 50	4770 00	55 40	358 90	6357 80	1475 67
874 90	545 00	14 00	20 00		185 00	764 00	110 90
879 71	824 25		2250 00	43 98	112 66	3230 69	1649 02
189 73	1237 69	50 00	28 50	78 91	183 37	1578 47	611 26

TABLE A.—The Common Schools

VILLAGES.—Continued.	RECEIPTS BY LOCAL SCHOOL AUTHORITIES.						Clergy Fund, balances and other sources
	For Teachers' Salaries (Legislative Grant).	For Maps, Apparatus, Prizes and Libraries (Legislative Grant).	Municipal School Assessment.	Trustees' School Assessment.	Trustees' Rate Bill for Fees.	Trustees' Rate Bill for Fees.	
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Embro.....	68 00		345 06		32 25		38 25
Fergus.....	159 00	20 00	1165 03	280 20	11 98		137 87
Fort Erie.....	97 00	5 00	825 00				455 08
Gananoque.....	170 00		770 00				401 20
Garden Island.....	60 00		450 00				52 56
Georgetown.....	162 00	25 00	3293 28				71 40
Hawkesbury.....	115 00		100 00		217 00		504 33
Hespeler.....	122 00		771 28				166 60
Holland Landing.....	75 00	16 00	600 00				10 56
Iroquois.....	72 00		297 86				176 96
Kemptville.....	126 00	15 00	520 00		242 50		381 09
Kincardine.....	180 00	53 00	1485 61				14 62
Lanark.....	82 00	25 00	577 00		178 62		19 86
Listowell.....	126 00		1540 00		17 50		290 50
Merrickville.....	104 00		775 00				66 10
Mitchell.....	190 00	34 05	1230 34		11 50		1072 93
Morrisburgh.....	122 00	15 00	716 00				
Mount Forest.....	144 00	5 00	1582 47	143 60			4475 13
Newburgh.....	95 00		310 00				
Newcastle.....	80 00	15 00	450 00		245 00		
New Fdinburgh.....	50 00	8 00	900 00		1 05		253 86
New Hamburg.....	115 00	30 00	1200 00				415 51
Newmarket.....	166 00		1056 00	56 00	348 50		344 13
Oil Springs.....	129 00	14 00	761 91				210 78
Orangeville.....	90 00		517 27				238 18
Orillia.....	133 00		1850 00		7 40		322 47
Oshawa.....	272 00	5 25	342 72	160 00			4359 93
Pembroke.....	120 00		353 66	610 66	109 00		0 34
Petrolia.....	151 00	20 00	1770 00				214 86
Portsmouth.....	122 00		892 94	142 00	57 54		190 30
Port Colborne.....	72 00	25 77	1207 65	161 31			1266 39
Port Dalhousie.....	122 00	15 00	900 00		189 25		800 92
Preston.....	138 00		1400 00	86 34	8 00		1752 04
Renfrew.....	61 00	9 00	580 54				2 52
Richmond.....	54 00	24 75	54 00		116 40		118 06
Seaforth.....	140 00		1800 00		12 00		820 87
Smith's Falls.....	118 00		400 00	241 00	250 25		822 95
Southampton.....	97 00		550 00				148 67
Stirling.....	82 00		452 03				118 62
Strathroy.....	180 00	30 00	2794 50				1060 39
Streetsville.....	72 00		420 00				349 62
Thorold.....	207 00		840 00	162 00	319 75		900 75
Trenton.....	208 00	35 25	1152 50	200 00			514 35
Vienna.....	86 00		782 65				59 50
Wardsville.....	72 00		500 95		80 00		360 48
Waterloo.....	165 00		1500 00				509 94
Welland.....	111 00		400 00				773 10
Wellington.....	54 00	16 75	554 79		153 96		24 41
Yorkville.....	180 00	35 08	1106 31		103 25		262 57
Total.....	7732 00	558 90	57183 70	2482 71	3541 36		38082 38

of Ontario.—Continued.

EXPENDITURE BY LOCAL SCHOOL AUTHORITIES.							
Total Receipts for all Com. School purposes during 1870.	For Teachers' Salaries.	For Maps, Apparatus, Prizes and Libraries, including 100 per cent.	For Sites and building School Houses.	For Rents and Repairs of School Houses.	For School Books, Stationery, Fuel and other expenses.	Total Expenditure for all Common School purposes during 1870.	Balances.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
483 56	427 00			21 13	16 76	464 89	18 67
1774 08	1472 00	55 00		50 52	183 70	1761 22	12 86
1382 08	679 92	10 00	30 02		94 82	814 76	567 32
1341 20	940 00		98 00	33 00	199 00	1270 00	71 20
562 56	450 00			59 61	52 95	562 56	
3551 68	1000 00	50 00	2315 13		186 55	3551 68	
936 33	820 00			10 00	92 92	922 92	13 41
1059 88	823 00			81 16	90 94	993 10	64 78
701 56	503 33	33 35		36 35	82 96	655 99	45 57
546 82	372 60			4 70	76 09	453 39	93 43
1284 59	680 68	50 00	258 66	30 25	96 98	1116 57	168 02
1733 23	1060 00	106 00	119 79	160 00	187 44	1633 23	100 00
882 48	680 00	50 00		5 30	96 64	831 94	50 54
1974 00	935 65		382 02	129 00	525 42	1972 09	1 91
945 10	762 00			60 00	113 00	935 00	10 10
2538 82	1160 00	71 40	119 20	10 65	396 86	1758 11	780 71
853 00	793 00	30 00			33 00	853 00	
6350 20	980 00	55 00	4622 39	80 69	405 14	6143 22	206 98
405 00	325 00				80 00	405 00	
790 00	620 00	30 00		75 00	65 00	790 00	
1212 91	644 00	25 50	154 00	19 49	97 41	940 40	272 51
1760 51	1041 31	60 72		58 79	223 60	1384 42	376 09
1970 63	1170 00	4 00	1 12	113 67	171 13	1459 92	510 71
1115 69	697 45	48 60		247 45	122 19	1115 69	
845 45	600 00			30 00	114 67	744 67	100 78
2312 87	700 00		910 00	54 16	241 91	1906 07	406 80
5139 90	2042 02	25 25	2474 15	82 57	515 91	5139 90	
1193 66	969 00			68 25	156 41	1193 66	
2155 86	1280 00	110 00	268 55	23 02	474 29	2155 86	
1404 78	811 22	5 00	124 00	53 56	336 74	1330 52	74 26
2733 12	867 90	53 89		213 29	1344 51	2479 59	253 53
2027 17	1100 00	30 00		20 23	168 03	1318 26	708 91
3384 38	1185 72	21 00	558 97	160 88	283 12	2209 69	1174 69
653 06	582 25	18 00		4 06	48 75	653 06	
367 21	195 10	50 10		7 63	56 88	309 71	57 50
2772 87	975 00		635 20	40 68	179 82	1830 70	942 17
1832 20	985 73		600 00	45 52	200 95	1832 20	
795 67	594 00				101 69	695 69	99 98
652 65	535 00			43 37	59 07	637 44	15 21
4064 89	1216 25	60 00	603 00	143 55	212 56	2235 36	1829 53
841 62	400 00			61 37	141 52	602 89	238 73
2429 50	1406 70			12 00	212 75	1631 45	798 05
2110 10	1455 13	70 50		23 73	4 65	1554 01	556 09
928 15	784 00				144 15	928 15	
1013 43	870 20				92 48	962 68	50 75
2174 94	1740 00			81 09	194 75	2015 84	159 10
1284 10	746 00				439 10	1185 10	99 00
803 91	685 00	33 50		2 80	79 59	800 89	3 02
1687 21	1199 65	70 16		182 81	234 59	1687 21	
109581 05	54358 88	1414 47	21355 20	3138 42	12823 48	93090 45	16490 60

TABLE A.—Common Schools

TOTALS.	RECEIPTS BY LOCAL SCHOOL AUTHORITIES.					
	For Teachers' Salaries (Legislative Grant).	For Maps, Apparatus, Prizes and Libraries (Legislative Grant).	Municipal School Assessment.	Trustees' School Assessment.	Trustees' Rate Bill for Fees.	Clergy' Reserve Fund, balances and other sources
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Total Counties.....	148430 90	11701 57	147468 00	932498 97	21573 26	266097 42
“ Cities.....	10645 00	806 58	84150 70	7605 98	7932 56	23549 40
“ Towns.....	12445 00	1339 46	96482 19	8511 56	11858 36	41686 95
“ Villages.....	7732 00	558 90	57183 70	2482 71	3541 36	38082 38
Grand Total, 1871.....	179252 90	14406 51	385284 59	951099 22	44905 54	369416 15
“ “ 1869.....	171143 00	13078 90	372743 59	890834 19	45709 80	333916 67
Increase.....	8109 90	1327 61	12541 00	60265 03	.....	35499 48
Decrease.....	.....	.....	.....	.....	894 26	.....

of Ontario.—*Concluded.*

Total Receipts for all Com. School purposes during 1870.	EXPENDITURE BY LOCAL SCHOOL AUTHORITIES.						
	For Teachers' Salaries.	For Maps, Apparatus, Prizes and Libraries, including 100 per cent.	For Sites and building School Houses.	For Rents and Repairs of School Houses.	For School Books, Stationery, Fuel and other expenses.	Total Expenditure for all Common School purposes during 1870.	Balances.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1527770 12	999180 17	24159 72	165052 19	42891 49	126241 87	1357525 44	170244 68
134690 22	70464 91	4943 64	9934 14	7947 12	24092 54	117382 35	17307 87
172323 52	98677 31	3373 50	11158 50	7883 45	22969 95	144068 71	28260 81
109581 05	54358 88	1414 47	21355 20	3138 42	12823 48	93090 45	16490 60
1944364 91	1222681 27	33891 33	207500 03	61860 48	186127 84	1712060 95	232303 96
1827426 15	1175166 05	29626 18	191370 21	54009 35	174724 97	1624896 76	202529 39
116938 76	47515 22	4265 15	16129 82	7851 13	11402 87	87164 19	29774 57

TABLE B.—The Common Schools of Ontario.

PUPILS ATTENDING THE COMMON SCHOOLS.

No.	COUNTIES.	School population between 5 and 16 years of age.	Pupils between 5 and 16 years of age.	Pupils of other ages.	Total No. of Pupils attending school.	Boys.	Girls.	Indigent pupils.	NUMBER OF PUPILS ATTENDING SCHOOL.							Number of children not attending any school whatever.	Average attendance of pupils.
									Less than 20 days during the year.	20 to 50 days.	50 to 100 days.	100 to 150 days.	150 to 200 days.	200 days to the whole year.	Whose days are not reported.		
1	Glengarry	6301	5285	221	5486	2774	2682	64	315	931	1240	1357	985	628	299	682	2333
2	Stormont	5327	4517	255	4752	2385	2307	10	478	800	1148	987	679	351	299	436	1688
3	Dundas	5800	5085	349	5434	2749	2685	26	386	688	1285	1085	912	421	647	278	2108
4	Prescott	4620	3572	140	3712	1879	1833	23	336	704	813	706	545	371	92	852	1561
5	Russell	2478	1762	54	1816	935	881	4	276	350	425	316	151	82	216	305	744
6	Carleton	9125	7775	283	8058	4290	3838	21	494	1562	2019	1727	1063	473	220	989	2949
7	Grenville	5391	4832	265	5097	2671	2426	59	739	1066	1229	968	702	463	308	382	2104
8	Leeds	10060	7687	567	8254	4255	3999	60	859	1481	1973	1602	1327	704	308	558	3106
9	Lanark	9011	7531	343	7894	4174	3720	13	920	1532	2031	1615	1144	632	739	3079	1884
10	Frontenac	7738	5311	193	5504	2881	2623	22	740	1238	1524	922	603	384	93	1774	2467
11	Renfrew	7841	6765	276	7041	3732	3369	73	911	1540	1679	1262	988	499	132	920	1569
12	Addington	4840	4041	315	4356	2276	2080	45	511	709	1185	1016	566	339	221	325	1726
13	Lemnox	3570	2658	102	2760	1196	964	22	148	439	529	517	392	135	.....	299	1972
14	Prince Edward	5211	4743	515	5258	2825	2433	41	628	1019	1381	1153	800	275	.....	1079	3473
15	Hastings	11773	9313	711	10624	5174	4850	41	1219	2279	2746	2004	1306	470	.....	662	3310
16	Northumberland	11150	9343	611	9654	5325	4620	15	1216	2325	2708	2011	1275	409	.....	681	3149
17	Durham	9588	7939	612	8551	4555	3996	82	848	1708	2277	1786	1257	585	.....	508	2210
18	Peterborough	7601	6542	318	6860	3593	3297	12	705	1255	1675	1376	991	350	538	906	2661
19	Victoria	8589	7541	579	8120	4184	3936	28	1103	1720	2061	1455	885	428	468	735	4568
20	Ontario	12625	11359	778	12137	6500	5637	40	1307	2414	3224	2623	1677	768	123	839	5289
21	York	17116	14542	910	15452	8424	7028	85	1625	3104	4198	3203	2236	1086	.....	346	2485
22	Peel	7290	6604	503	7107	3876	3231	73	748	1426	1947	1421	1063	502	.....	302	5394
23	Simcoe	17133	14634	809	15443	8197	7246	54	1984	3216	4196	2894	1980	864	309	446	1992
24	Halton	5670	4986	350	5336	2954	2402	80	521	1032	1490	1188	751	354	.....	591	2818
25	Westworth	8569	7056	429	7476	4018	3458	135	847	1448	2001	1605	1117	458	.....	339	1944
26	Brant	5860	5034	342	5376	2854	2522	35	547	1054	1447	1123	781	387	37	278	2030
27	Lincoln	5993	4742	359	5103	2720	2383	62	528	955	1445	1053	774	247	.....	295	1809
28	Welland	5674	4892	388	5280	2815	2465	69	692	1112	1443	1115	629	398	62	215	2426
29	Haldimand	6054	5866	343	6209	3231	2978	39	566	1101	1500	1269	931	454	388	545	3023
30	Norfolk	8838	7926	685	8611	4461	4156	67	985	1782	2407	1788	1087	510	52	711	4947
31	Oxford	12353	11378	840	12218	6498	5720	33	1039	2138	3052	2617	1944	1110	318	451	3638
32	Waterloo	8675	8291	316	8607	4804	3743	33	642	1335	2223	1906	1506	943	52	936	5258
33	Wellington	15955	14774	924	15698	8482	7216	27	1904	3418	4402	3520	1948	806	.....	.....	.....

PUPILS ATTENDING THE COMMON SCHOOLS.

NUMBER IN THE DIFFERENT BRANCHES OF INSTRUCTION.

No.	READING.					Arithmetic.	Grammar.	General Geography.	Canadian Geography.	History.	Writing.	Book-keeping.	Mensuration.	Algebra.	Geometry.	Natural Philosophy.	Vocal Music.	Linear Drawing.	Girls' learning Needlework.	Other studies.
	1st class. (lowest).	2nd class.	3d class.	4th class.	5th class.															
1	1143	858	1006	943	1324	2818	1435	1417	513	688	3002	127	88	129	61	180	669	58	45	
2	889	678	907	930	1229	2315	959	830	233	415	2050	162	7	229	13	16	70			
3	855	734	925	1003	1175	2773	983	1008	235	399	2637	53	13	78	13	8	78	12	12	
4	406	490	535	561	631	1729	753	550	208	285	1782	27	15	28	5	5	51	2		
5	436	308	332	294	270	858	377	320	142	155	830	13	4	16	8	5	35		25	
6	1608	1376	1824	1522	1310	4231	1778	1914	983	710	4217	110	31	85	49	95	246	6	19	50
7	1023	819	986	964	1181	3051	1019	1060	342	579	3005	86	15	90	10	82				60
8	1477	1362	1696	1581	1718	4942	1656	1778	712	1138	4172	161	37	161	40	86	40		10	60
9	1730	1356	1549	1604	1657	4514	1800	1868	961	802	4482	74	9	60	55	24	459	54	10	73
10	1374	1101	1203	1018	674	2865	1285	1291	553	184	2858	69	5	25	18	5	132		10	6
11	1307	1250	1429	1228	1254	3926	1322	1717	780	652	3172	168	14	79	12	68	118	3	355	14
12	860	645	897	808	943	2481	935	1233	599	501	2444	164	14	80	18	33	193	8	36	34
13	418	324	448	461	534	1299	467	603	188	278	1257	83	2	16	3	2		10		
14	950	852	1040	1039	1107	3651	1963	2540	1333	889	3424	182	63	141	68	130	212	40	14	201
15	2442	2016	2370	1629	1258	5454	2589	3510	1544	1082	5457	366	211	130	45	65	731	15	23	173
16	2543	2513	2663	1579	656	7016	4693	4733	2219	820	7226	262	51	193	98	44	844			25
17	1888	1668	2036	1761	1178	6406	3036	4573	2529	1076	5771	305	81	254	92	138	517	87	58	216
18	1498	1222	1537	1269	863	4421	2044	2384	1261	744	4259	152	28	47	53	19	1128	8	138	77
19	1899	1513	1657	1323	1161	4828	2100	2572	1234	721	4681	46	51	98	54	53	725			36
20	2657	2156	2418	2230	2177	7878	3269	3789	1925	1739	7614	197	65	159	81	138	2812	88	79	156
21	3560	2551	3102	2739	3041	9470	4579	5607	2759	2085	9401	364	182	282	143	228	2189	413	245	80
22	1474	1005	1427	1404	1640	4501	2044	2557	1352	1099	4415	216	40	135	39	100	912	38		272
23	3697	2955	3603	2752	2329	4680	3530	4168	2225	1953	8390	316	100	171	84	213	728	86	39	387
24	1003	825	1131	963	963	3395	1577	2141	661	870	3239	151	42	107	41	140	389	42	36	21
25	1549	1279	1508	1292	1482	4917	2234	2851	1702	1019	4719	212	49	123	67	127	969	27	92	78
26	1029	885	1039	1054	1205	3827	1691	2058	1096	937	3495	182	83	148	57	76	809	84	78	129
27	961	830	1006	926	1086	3214	1347	1594	802	712	2951	131	41	69	38	14	294	49	50	140
28	930	930	992	1074	1296	3483	1486	1865	1059	570	3445	203	15	104	40	35	565	12		71
29	1334	1075	1349	1188	1296	3926	1752	2347	1172	852	3624	214	68	106	53	131	756	8		
30	1715	1368	1746	1646	1646	5188	1915	2574	1002	1088	5096	415	37	133	53	107	710	61	25	
31	2360	1855	2433	2296	2523	8294	3695	4753	3298	2035	7971	269	328	166	115	299	1198	106	30	616
32	2127	1554	1802	1608	1378	6290	2863	3554	2260	1103	5666	245	125	159	115	150	2593	128	35	144
33	3213	2634	3291	2844	2732	9348	4339	5408	2649	3103	7707	455	198	224	111	533	2368	207	25	43

TABLE B.—The Common Schools of Ontario.—Continued.

PUPILS ATTENDING THE COMMON SCHOOLS.																	
No.	COUNTIES.—Cont'd.	School population between 5 and 16 years of age.	Pupils between 5 and 16 years of age.	Pupils of other ages.	Total No. of Pupils attending school.	Boys.	Girls.	Indigent pupils.	NUMBER OF PUPILS ATTENDING SCHOOL.							Number of children not attending any school whatever.	Average attendance of pupils.
									Less than 20 days during the year.	20 to 50 days.	50 to 100 days.	100 to 150 days.	150 to 200 days.	200 days to the whole year.	Whose days are not reported.		
34	Grey	17509	16475	1046	17521	9312	8209	2	2303	4053	4690	3232	2122	893	228	1680	5600
35	Perth	11747	10822	428	11250	5985	5265	29	1237	2462	2814	1233	1856	973	575	729	4194
36	Huron	19093	17437	842	18299	9661	8635	7	1935	3425	4568	3582	2696	1411	682	1258	7140
37	Bruce	13392	12538	736	13204	7080	6214	8	1511	2342	3302	2614	1821	928	776	849	4804
38	Middlesex	19218	17127	895	18022	9534	8468	41	1904	3257	4546	3709	2890	1483	233	1487	6884
39	Elgin	9623	8294	781	9005	4801	4204	114	807	1729	2289	1904	1376	829	71	353	3641
40	Kent	9471	7982	493	8445	4466	3985	15	941	1587	2292	1774	1195	519	137	1076	3118
41	Lambton	9647	8918	328	9246	4880	4366	20	1253	1876	2379	1798	1430	448	62	544	3298
42	Essex	7029	5853	248	6101	3139	2962	53	756	1268	1685	1151	755	346	140	1100	2694
43	District of Algoma	322	263	6	269	148	121	10	20	33	108	55	36	17	.....	40	116
44	Perry Sound	80	76	.....	76	34	42	.....	39	12	25	.....	.....	.....	.....	.....	35
	Total	331261	339423	20489	359912	190714	169198	1792	40043	71065	93616	71985	51172	24673	7358	28861	141598
CITIES.																	
45	Toronto	13333	9759	11	9770	5019	4721	.....	988	1453	2169	1702	1925	1333	.....	100	4693
46	Hamilton	5800	5756	17	5773	2972	2801	316	299	670	1247	1015	1283	1259	.....	.....	3604
47	Kingston	3600	3207	30	3237	1618	1619	150	140	364	708	683	758	584	.....	500	1720
48	London	4160	3997	111	4108	2151	1957	.....	295	668	902	892	1075	276	.....	40	2215
49	Ottawa	5000	3797	217	4014	2031	1983	40	407	751	1083	732	645	396	.....	.....	1650
	Total	31893	26516	386	26502	13821	13081	506	2129	3906	6109	5024	5686	4048	.....	640	13882
TOWNS.																	
50	Amherstburgh	650	537	22	559	282	277	.....	62	76	91	115	185	30	.....	100	252
51	Barrie	630	636	4	640	333	307	.....	39	76	118	230	124	53	.....	.....	283
52	Belleville	2000	1870	25	1895	871	1024	.....	271	351	417	331	304	221	.....	60	829

PUPILS ATTENDING THE COMMON SCHOOLS.

NUMBER IN THE DIFFERENT BRANCHES OF INSTRUCTION.

No.	READING.					Arithmetic.	Grammar.	General Geography.	Canadian Geography.	History.	Writing.	Book-keeping.	Mensuration.	Algebra.	Geometry.	Natural Philosophy.	Vocal Music.	Linear Drawing.	Girls' learning Needlework.	Other studies.
	1st class. (lowest).	2nd class.	3rd class.	4th class.	5th class.															
34	3860	3492	4022	3319	2337	10456	3371	5824	3021	1828	10010	556	144	207	86	133	1859	114	192	501
35	2387	1904	2250	1982	1889	6759	2664	3875	2147	1365	6388	142	69	176	86	43	2634	117	21	96
36	3820	3107	3828	3447	3226	10834	4469	6106	2733	2554	9900	442	260	302	230	295	1134	117	12	229
37	3066	2428	2754	2446	2072	7538	2952	4350	2780	1572	6401	480	105	193	94	126	897	73		
38	3313	2968	3753	3297	3978	10815	5513	7289	4161	3133	10936	460	316	434	280	389	2125	163	28	224
39	1520	1285	1486	1642	2396	5642	2145	3248	1465	1400	4725	758	132	264	143	238	287	104	54	174
40	1895	1397	1745	1499	1498	5006	2064	2640	1472	1121	4671	338	26	121	45	86	955	127	105	141
41	2009	1545	1888	1626	1904	5626	2573	3605	1978	1149	5342	164	20	93	41	52	781	1		53
42	1490	1126	1159	1062	853	3300	1759	1304	437	516	3182	90	21	33	8	32	559	12	15	100
43	60	48	56	70	35	234	94	199	120	18	227	13				5				
44	18	14	19	13	14	20	14	16			70									
	76575	62620	74848	64579	65028	214212	95133	130126	61258	40639	207371	9929	3227	5771	2813	4754	34771	2393	2011	4554
45	3160	1899	1919	1648	999	8654	4081	8784	2845	2651	5883	251	353	326	198	193	7708	183	3135	
46	2222	982	1398	895	307	5401	1564	4915	978	423	5341	73	140	111	24	112	1759	40	543	384
47	741	527	728	683	431	2084	1486	1972	748	761	2242	265	146	147	165	153	1416	192	908	
48	1404	1076	689	495	434	2897	2387	2597	1251	1323	2809	162	472	816	105	378	1116	513	544	922
49	1290	756	646	577	438	2827	2345	2180	623	530	2536	106	165	239	79	100	2285	22	230	
	9117	5240	5380	4298	2629	21863	11619	20778	6445	5888	18661	797	1216	1639	511	1136	14284	950	5420	1306
50	108	114	139	127	71	372	300	293	55	79	384	6	20	23	6		336		83	
51	137	146	194	108	55	503	317	453	115	67	508			4	5	10	150		50	36
52	640	350	419	292	190	1609	1024	1372	334	303	1426	35		45	3	30	1129		150	

TABLE B.—The Common Schools of Ontario.—Continued.

TOWNS—Cont'd.	School population between 5 and 16 years of age.	Pupils between 5 and 16 years of age.	Pupils of other ages.	Total No. of Pupils of all ages attending school.	Boys.	Girls.	Indigent pupils.	NUMBER OF PUPILS ATTENDING SCHOOL.						Number of children not attending any school whatever.	Average attendance of pupils.
								Less than 20 days during the year.	20 to 50 days.	50 to 100 days.	100 to 150 days.	150 to 200 days.	200 days to the whole year.	Whose days are not reported.	
53 Berlin	757	748	8	756	390	366	30	40	184	136	159	127	100	.....	419
54 Bethwell	483	435	10	445	203	242	.....	51	88	124	77	55	50	38	141
55 Bowmanville	750	633	6	639	328	311	97	23	69	149	145	161	92	.....	343
56 Brantford	2100	2130	24	2154	1092	1062	43	193	291	466	365	429	410	59	1097
57 Brockville	1290	1149	74	1223	620	603	.....	76	127	260	317	322	121	.....	702
58 Chatham	1600	1693	68	1761	961	800	.....	189	272	475	253	340	232	.....	633
59 Clifton	400	359	10	369	187	182	20	25	48	97	76	47	48	36	185
60 Cobourg	1100	720	19	739	456	283	151	33	75	178	160	132	161	40	306
61 Collingwood	900	818	.....	818	487	331	.....	119	192	253	122	104	58	.....	296
62 Cornwall	500	454	10	464	265	199	.....	70	65	106	105	80	38	.....	218
63 Dundas	800	753	.....	753	390	363	52	75	115	221	139	134	69	65	327
64 Galt	1118	961	5	966	515	451	.....	31	89	238	180	280	148	.....	512
65 Goderich	1064	954	14	968	515	453	.....	46	120	208	256	256	132	.....	510
66 Guelph	1600	1523	22	1545	799	746	116	153	266	413	376	234	103	.....	607
67 Ingersoll	1274	792	10	802	397	405	83	40	118	239	214	128	63	.....	375
68 Lindsay	1300	1301	11	1312	812	500	.....	117	219	330	310	274	62	.....	512
69 Milton	317	302	10	312	198	114	.....	26	41	61	64	39	21	.....	139
70 Napanee	800	763	.....	763	387	376	8	100	152	275	130	81	5	20	261
71 Niagara	500	396	7	403	231	172	.....	17	39	72	91	106	78	5	158
72 Oakville	500	464	30	474	209	265	78	41	83	103	88	92	57	10	243
73 Owen Sound	900	796	30	826	414	412	.....	60	114	161	210	260	21	.....	516
74 Paris	800	772	11	783	411	372	70	55	95	193	192	213	35	.....	431
75 Perth	650	563	10	573	294	279	.....	10	34	81	82	167	59	140	351
76 Peterborough	1120	1094	24	1118	506	612	145	60	149	304	295	209	130	.....	439
77 Picton	550	490	16	506	267	239	.....	29	47	99	171	104	156	20	275
78 Port Hope	1112	1059	145	1204	710	494	.....	104	115	195	453	215	122	.....	511
79 Prescott	650	620	.....	620	254	266	32	17	51	149	108	116	67	12	292
80 Sandwich	400	284	.....	284	143	141	.....	13	25	51	60	46	89	.....	143
81 Sarnia	800	685	49	734	376	358	30	107	135	192	148	152	.....	120	311
82 St. Catharines	2250	1909	7	1916	912	1004	.....	152	248	455	448	380	233	.....	1015
83 St. Mary's	1250	1197	5	1202	592	610	.....	126	245	350	230	195	56	.....	564
84 St. Thomas	550	508	14	522	259	263	50	9	91	147	127	119	29	.....	262
85 Simcoe	500	476	.....	476	234	242	5	2	9	10	6	13	.....	436	242

PUPILS ATTENDING THE COMMON SCHOOLS.

NUMBER IN THE DIFFERENT BRANCHES OF INSTRUCTION.

No.	READING.					Arithmetic.	Grammar.	General Geography.	Canadian Geography.	History.	Writing.	Book-keeping.	Mensuration.	Algebra.	Geometry.	Natural Philosophy.	Vocal Music.	Linear Drawing.	Girls learning Needlework.	Other studies.
	1st class, (lowest).	2nd class.	3rd class.	4th class.	5th class.															
55	241	162	146	87	118	650	201	522	219	89	583	25	32	28	14	.....	10	522	.....	.....
56	344	98	82	83	62	323	211	277	263	143	323	7	.....	17	2	.....	93	125	47	60
57	120	154	207	145	26	500	278	489	78	129	512	.....	156	236	42	136	1665	.....	.....	.....
58	826	516	400	177	235	1985	907	1976	1320	703	1988	157	90	191	30	90	.....	.....	.....	.....
59	37	329	172	250	222	872	486	501	263	280	636	2	2	92	27	64	.....	.....	.....	.....
60	38	491	442	337	288	131	716	890	484	339	1098	67	7	92	10	.....	.....	30	.....	.....
61	33	491	337	288	131	1201	716	890	484	65	208	14	6	14	10	31	95	7	45	.....
62	115	74	83	45	65	239	168	193	.....	138	464	46	25	13	17	.....	.....	.....	.....	.....
63	148	138	185	149	99	507	301	338	199	107	741	17	8	17	24	16	.....	.....	.....	.....
64	370	106	227	138	14	597	221	293	.....	22	422	38	8	9	9	.....	.....	.....	.....	.....
65	62	99	64	31	68	297	193	294	35	57	356	25	.....	8	.....	.....	.....	.....	.....	.....
66	63	73	166	168	125	722	475	662	127	107	741	17	16	38	16	8	.....	.....	.....	.....
67	164	206	200	164	140	966	400	400	.....	126	966	38	16	.....	.....	.....	.....	.....	.....	.....
68	164	206	200	164	140	966	400	400	.....	86	735	15	.....	.....	.....	.....	908	.....	.....	108
69	256	206	200	164	140	966	400	400	.....	280	1154	56	23	66	25	.....	492	80	128	90
70	213	312	253	253	248	1230	813	850	110	201	741	35	7	10	7	8	.....	.....	.....	.....
71	363	235	352	248	228	741	519	630	158	250	628	2	12	41	3	2	30	10	.....	.....
72	177	161	246	128	90	751	400	427	149	.....	.....	6	1	6	3	.....	200	.....	.....	.....
73	453	310	181	157	104	200	129	190	.....	50	180	6	.....	.....	.....	.....	180	.....	.....	.....
74	80	32	70	73	57	200	129	190	.....	85	446	.....	.....	.....	.....	.....	.....	.....	.....	.....
75	150	175	137	206	95	499	239	246	.....	170	297	22	.....	11	1	6	.....	.....	.....	.....
76	116	68	81	71	47	365	181	161	85	20	297	.....	.....	.....	.....	.....	100	.....	25	.....
77	129	60	207	116	40	461	207	284	28	20	371	.....	.....	.....	.....	.....	.....	.....	.....	.....
78	362	131	246	117	125	512	480	503	72	147	456	31	44	19	10	.....	154	12	30	26
79	225	199	133	170	45	752	320	684	73	186	684	18	57	57	11	32	.....	.....	.....	.....
80	113	119	212	94	35	318	218	257	30	30	269	15	.....	.....	.....	.....	.....	.....	.....	.....
81	277	285	254	184	108	943	635	598	87	182	934	19	.....	32	4	50	60	72	171	.....
82	128	58	131	63	90	409	284	506	20	70	384	20	.....	60	6	7	.....	.....	.....	.....
83	316	173	402	206	150	988	456	456	131	351	988	.....	.....	.....	.....	.....	.....	.....	.....	.....
84	118	106	102	63	70	391	210	341	40	118	401	3	.....	.....	.....	17	153	.....	.....	55
85	54	59	67	48	56	213	133	116	45	52	240	4	.....	.....	.....	10	.....	2	40	.....
86	211	180	194	133	31	598	283	608	.....	92	576	6	.....	19	3	.....	.....	40	.....	.....
87	471	471	400	291	166	1101	442	583	270	218	1066	89	11	34	27	35	905	23	303	.....
88	204	309	221	275	133	914	444	895	176	249	634	.....	7	77	9	.....	781	.....	.....	.....
89	121	101	101	88	88	399	399	399	177	177	439	89	89	177	14	89	.....	.....	.....	177
90	140	101	95	74	63	464	219	308	.....	46	420	44	44	18	10	44	434	100	.....	476

TABLE B.—The Common Schools of Ontario.—Continued.

PUPILS ATTENDING THE COMMON SCHOOLS.

No.	TOWNS.—Cont'd.	School population between 5 and 16 years of age.	Pupils between 5 and 16 years of age.	Pupils of other ages.	Total No. of Pupils of all ages attend- ing school.	Boys.	Girls.	Indigent pupils.	NUMBER OF PUPILS ATTENDING SCHOOL.							Number of children not attending any school whatever.	Average attendance of pupils.
									Less than 20 days during the year.	20 to 30 days.	50 to 100 days.	100 to 150 days.	150 to 200 days.	200 days to the whole year.	Whose days are not re- ported.		
86	Stratford.....	1050	996	8	1004	514	490	.....	85	181	254	177	245	62	.....	76	544
87	Whitby.....	900	841	14	855	430	425	.....	79	146	228	192	166	44	.....	20	368
88	Windsor.....	960	878	1	879	463	413	.....	53	171	266	194	183	12	.....	.....	371
89	Woodstock.....	1172	1072	31	1103	542	561	.....	163	154	269	204	222	151	.....	.....	516
	Total.....	38037	34561	734	35265	18232	17043	1011	2901	5166	8432	7542	7099	3618	536	771	16713
VILLAGES.																	
90	Arnprior.....	350	297	4	301	151	150	15	12	25	37	55	70	102	.....	60	150
91	Ashburnham.....	200	140	1	141	79	62	12	8	9	10	29	40	45	.....	.....	86
92	Aurora.....	402	333	19	352	198	154	.....	26	77	100	60	76	13	.....	12	144
93	Bath.....	174	151	7	161	72	89	.....	6	17	23	22	36	57	.....	20	95
94	Bradford.....	400	336	.....	336	181	152	.....	29	50	143	57	41	16	.....	.....	131
95	Brampton.....	525	484	4	488	239	249	39	68	115	135	119	119	12	.....	.....	257
96	Brighton.....	356	349	26	375	190	185	.....	21	62	98	86	77	9	.....	7	153
97	Caledonia.....	350	328	4	332	170	162	20	31	62	98	72	55	14	.....	.....	143
98	Cayuga.....	250	232	.....	232	125	107	.....	22	31	59	55	42	23	.....	.....	102
99	Chippewa.....	400	311	.....	311	157	154	.....	14	44	65	90	74	24	.....	40	138
100	Clinton.....	560	540	2	542	260	282	31	40	122	193	125	125	31	.....	.....	237
101	Colborne.....	240	188	.....	188	113	75	.....	32	38	70	30	8	10	.....	.....	104
102	Dunnville.....	430	400	6	406	215	191	.....	70	103	94	84	52	3	.....	.....	120
103	Elora.....	600	568	.....	568	266	302	.....	45	88	147	116	133	39	.....	.....	225
104	Embro.....	200	165	12	177	74	103	.....	10	33	52	40	28	14	.....	.....	72
105	Fergus.....	520	505	2	507	269	238	.....	22	79	145	122	86	53	.....	.....	230
106	Fort Erie.....	280	260	4	264	148	116	.....	22	45	72	62	42	21	.....	.....	113
107	Gananoque.....	520	466	.....	466	260	206	.....	53	88	106	120	75	24	.....	.....	214
108	Garden Island.....	207	186	.....	186	107	79	.....	6	20	42	31	41	46	.....	.....	107
109	Georgetown.....	420	306	6	312	176	136	.....	14	24	87	90	69	28	.....	41	193
110	Hawkesbury.....	343	278	23	301	151	150	4	11	29	73	92	80	16	.....	.....	136
111	Hespeler.....	350	347	12	359	130	229	.....	44	47	75	64	63	66	.....	5	177

PUPILS ATTENDING THE COMMON SCHOOLS.

NUMBER IN THE DIFFERENT BRANCHES OF INSTRUCTION.

No.	READING.					Arithmetic.	Grammar.	General Geography.	Canadian Geography.	History.	Writing.	Book-keeping.	Mensuration.	Algebra.	Geometry.	Natural Philosophy.	Vocal Music.	Linear Drawing.	Girls' Needlework.	Other studies.
	1st class, (lowest).	2nd class.	3rd class.	4th class.	5th class.															
86	293	174	256	159	217	984	342	684	169	32	934			26	1	4	300	83	150	
87	284	166	191	166	45	952	895	900	47	100	815	90	12	36	43	5	279	83	84	
88	249	214	151	160	105	615	282	328	105	96	439	12		4		3	461		65	
89	321	146	235	204	197	906	624	815	82	241	834	54	67	36	30	89	994	139	109	
16	9838	7269	8017	5818	4093	27847	15865	21450	5546	6188	25719	1044	742	1471	413	786	9981	1143	1321	1287
90	80	87	50	36	70	174	124	124			186									
91	45	35	112	18	12	96	60	60		12	96	4							50	
92	90	35	132	64	51	262	130	138	12	51	227	10		6	1	8				
93	24	27	36	40	34	110	74	110	21	32	110	16	10	29	4	10	161			
94	94	58	106	106	106	207	138	207	40	207	207	6		10			50			
95	95	72	142	105	74	338	203	234		24	308	5								
96	75	50	112	98	40	305	250	239		84	250			10						
97	66	100	64	50	52	282	156	282		40	282	24								
98	55	37	78	17	45	145	97	140	45	45	134		15	15						
99	63	51	59	47	92	230	135	135	92	92	223	33	9	27	10				3	
100	166	118	100	84	22	348	258	348		32	348	5								
101	84	51	45	8		188	104	104			188									
102	66	78	89	57	63	210	57	208	18	27	280	18	4	6	6	12				
103	86	138	112	119	113	471	360	431	123	97	402	27	16	28	3	13	508		37	
104	26	37	46	55	13	114	46	69			116				2	38	61			
105	53	125	135	101	98	487	284	368	87	148	470	65	43	52	19	38				
106	83	40	35	67	39	201	70	106	70		181	10		1			264			
107	178	50	140	46	52	288	238	288	52	98	303	10		4	4					
108	57	34	31	34	30	129	43	45			186	10	7	3	6				40	
109	60	40	97	91	24	202	116	106	60	24	172	13		7	6	5	163			
110	91	45	55	47	63	188	89	150	52	22	222	12	7	11	5					
111	46	72	94	81	59	253	66	260	60	61	266	1	15	18	3	2				1

TABLE B.—The Common Schools of Ontario.—Continued.

PUPILS ATTENDING THE COMMON SCHOOLS.

No.	VILLAGES.—Cont'd.	School population between 5 and 16 years of age.	Pupils between 5 and 16 years of age.	Pupils of other ages.	Total No. of Pupils of all ages attend- ing school.	Boys.	Girls.	Indigent pupils.	NUMBER OF PUPILS ATTENDING SCHOOL.							Number of children not attending any school whatever.	Average attendance of pupils.
									Less than 20 days during the year.	20 to 50 days.	50 to 100 days.	100 to 150 days.	150 to 200 days.	200 days to the whole year.	Whose days are not re- ported.		
112	Holland Landing	200	177	22	199	97	102	.....	14	32	63	38	46	6	.....	23	85
113	Iroquois	200	163	.....	163	86	77	.....	15	28	40	29	34	17	.....	.....	72
114	Kemptville	350	302	3	305	132	173	6	12	34	77	89	89	38	.....	.....	148
115	Kincaidine	550	517	4	521	288	233	.....	72	108	135	114	89	3	.....	.....	212
116	Lanark	230	164	1	165	92	73	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
117	Listowel	340	326	.....	326	180	146	.....	16	68	110	70	51	11	165	14	156
118	Merriekville	330	328	11	339	177	162	.....	58	74	93	61	49	4	.....	.....	108
119	Mitchell	625	475	22	497	249	248	.....	30	60	134	110	90	73	.....	130	252
120	Morrisburgh	300	266	9	275	150	125	.....	14	42	74	58	48	39	.....	.....	148
121	Mount Forest	476	425	10	435	199	236	.....	21	50	90	145	73	56	.....	102	212
122	Newburgh	250	211	.....	211	108	103	.....	22	43	45	45	49	7	.....	.....	98
123	Newcastle	220	203	2	205	125	80	24	25	36	57	42	39	6	.....	.....	87
124	New Edinburgh	150	140	6	146	76	70	.....	7	16	42	41	17	23	.....	.....	77
125	New Hamburg	334	330	4	334	172	162	.....	12	48	67	58	81	68	.....	.....	176
126	Newmarket	555	493	26	519	231	208	34	40	73	116	88	81	41	.....	60	191
127	Oil Springs	250	190	2	192	81	111	.....	2	2	12	36	40	100	.....	.....	84
128	Orangeville	330	280	.....	280	150	130	.....	14	26	48	85	107	.....	.....	.....	145
129	Orillia	322	273	8	281	165	116	.....	35	63	62	44	53	24	.....	.....	108
130	Oshawa	800	760	23	783	378	405	.....	61	153	218	171	148	26	.....	.....	412
131	Pembroke	350	265	6	271	156	115	8	33	42	58	56	46	36	.....	.....	101
132	Petrolia	640	580	.....	580	280	300	.....	48	76	182	179	54	41	.....	60	251
133	Portsmouth	400	317	.....	317	173	144	4	18	36	79	65	68	51	.....	50	164
134	Port Colborne	350	313	11	324	176	148	.....	34	44	97	67	63	19	.....	.....	135
135	Port Dalhousie	324	281	12	293	160	133	.....	27	47	59	67	63	30	.....	36	143
136	Preston	400	342	.....	342	182	160	.....	11	43	80	85	115	17	.....	41	172
137	Rentrev.	200	184	6	190	100	90	.....	15	36	48	35	44	12	.....	.....	94
138	Richmond	175	164	3	167	82	85	.....	10	27	30	37	38	25	.....	.....	67
139	Seaforth	400	379	6	385	214	171	.....	37	64	95	68	97	24	.....	.....	150
140	Smith's Falls	362	327	.....	327	158	169	29	11	74	82	87	62	11	.....	83	149
141	Southampton	258	238	2	240	117	123	.....	31	34	44	45	56	30	.....	12	114
142	Stirling	230	172	13	185	97	88	.....	10	22	59	76	18	.....	.....	21	96
143	Strathroy	672	646	.....	646	352	294	.....	56	115	234	117	112	12	.....	40	276
144	Streetsville	170	128	4	132	74	58	.....	8	13	26	32	28	25	.....	15	77

PUPILS ATTENDING THE COMMON SCHOOLS.

NUMBER IN THE DIFFERENT BRANCHES OF INSTRUCTION.

No.	READING.					Arithmetic.	Grammar.	General Geography.	Canadian Geography.	History.	Writing.	Book-keeping.	Mensuration.	Algebra.	Geometry.	Natural Philosophy.	Vocal Music.	Linear Drawing.	Girls' Learning Needlework.	Other Studies.
	1st class. (lowest).	2nd class.	3rd class.	4th class.	5th class.															
112	43	25	69	24	38	155	45	112	11	20	185	7					199		51	
113	31	16	34	44	38	100	50	57	17	81	90					54		11	45	
114	42	50	76	85	62	213	211	213	21	90	243	10				36				
115	114	92	95	200	90	230	190	230	81	25	407									
116	32	30	20	45	38	163	103	161	25		163	5		15	7					
117	50	50	114	75	37	226	226	226			197		6	6	2					
118	126	56	57	60	40	183	84	42	6	11	197			16	1					
119	109	81	100	146	61	388	230	266		121	184	30		7	2					
120	116	81	100	64	46	196	85	124		12	184	16		16	1	25				
121	133	51	38	55	161	357	265	297	21	42	297	18	6	16	7	26	123	17		
122	41	27	88	55		139	55	138			139									
123	27	21	89	68		175	68	108		17	157									
124	32	33	32	26	23	58	46	27	7	7	58	4	3	3	4		23		21	
125	70	82	73	57	52	334	192	142	66		334	15		15	8	10	110	132		
126	82	105	99	86	67	355	124	206	114	67	251	14		20	5	30				
127	50	40	38	30	34	100	50	60	20	50	111	12		12	2		192	25	40	93
128	70	50	120	40		260	60	60		60	260									280
129	71	34	71	54	51	170	52	85		8	234	6		5	6					
130	246	315	120	135	40	700	235	494	42	85	700					12	574		166	
131	66	100	42	63		192	98	81	10	22	180		6							
132	121	121	156	56	126	426	307	307	79	22	180	14					62			
133	84	53	73	56		201	307	307	79	79	414	15	37	28	22		200	24		
134	73	52	40	71	53	141	141	141	25	65	215	10	8	10	7		217			
135	60	79	98	45	11	259	176	186	14	31	161	15	10	10	4					
136	122	60	76	56	38	331	97	97	97	31	220	11	9	9	3	13	212	12		
137	50	20	30	40	50	126	179	223	30	30	252	10	10	18	18		169	74		153
138	40	43	32	30	22	69	120	120			120									
139	112	43	104	49	65	31	20	102			102			19	14					
140	71	50	90	75	41	273	190	218		96	218	15				9				
141	86	45	88	36	30	134	148	127		49	211			1	1					
142	28	46	49	33	29	170	147	147	13	30	170	9		5	5					
143	177	116	216	47	90	111	29	62		10	140	2					646	197		646
144	24	29	43	36		409	233	353		90	353			45						
						108	79	79		36	108	2								

TABLE B.—The Common Schools of Ontario.—*Concluded.*

PUPILS ATTENDING THE COMMON SCHOOLS.																	
No.	VILLAGES—Cont'd.	School population between 5 and 16 years of age.	Pupils between 5 and 16 years of age.	Pupils of other ages.	Total No. of Pupils of all ages attend- ing school.	Boys.	Girls.	Indigent pupils.	NUMBER OF PUPILS ATTENDING SCHOOL.							Number of children not attending any school whatever.	Average attendance of pupils.
									Less than 20 days during the year.	20 to 50 days.	50 to 100 days.	100 to 150 days.	150 to 200 days.	200 days to the whole year.	Whose days are not re- ported.		
145	Thorold	450	395	41	436	235	201	62	61	114	117	67	59	18	.....	41	154
146	Trenton	500	449	7	456	264	192	.....	20	89	107	125	81	34	.....	30	250
147	Vienna	240	173	9	182	99	83	.....	12	22	45	44	46	13	.....	.....	93
148	Wardsville	178	164	.....	164	87	77	.....	12	24	55	42	26	6	.....	10	105
149	Waterloo	500	445	6	451	225	226	.....	24	48	101	93	124	61	.....	.....	248
150	Welland	328	328	.....	328	185	143	.....	35	73	84	61	69	15	.....	.....	138
151	Wellington	144	124	8	132	71	61	18	13	23	34	10	45	7	.....	20	65
152	Yorkville	586	458	2	460	237	223	1	53	78	116	81	69	63	.....	.....	206
46	Total	22755	19988	421	20409	10594	9815	237	1607	3183	5150	4554	3992	1758	165	993	9445
153	Total Counties	301261	339423	20489	359912	190714	169198	1792	40043	71065	93516	71985	51172	24673	7358	28861	141598
154	" Cities	31893	26516	386	26902	13821	13081	506	2129	3906	6109	5024	5686	4048	.....	640	13882
155	" Towns	38057	34561	754	35295	18252	17043	1911	2901	5166	8432	7543	7099	3618	536	771	16713
156	" Villages	22755	19988	421	20409	10594	9815	237	1607	3183	5150	4554	3992	1758	165	993	9445
157	Grand Total, 1870	483966	420488	22030	442518	233381	209137	3546	46680	83320	113307	89106	67949	34097	8059	31265	181638
158	" " 1869	470400	409184	23246	432430	229685	202745	3425	45081	82307	110295	85735	63496	33298	10218	34600	178063
159	Increase	13566	11304	.....	10088	3696	6392	121	1599	1013	3012	3371	2453	799	.....	.....	3585
160	Decrease .....	.....	.....	1246	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2159	3395	.....

PUPILS ATTENDING THE COMMON SCHOOLS.

NUMBER IN THE DIFFERENT BRANCHES OF INSTRUCTION.

No.	READING.					Arithmetic.	Grammar.	General Geography.	Canadian Geography.	History.	Writing.	Book-keeping.	Mensuration.	Algebra.	Geometry.	Natural Philosophy.	Vocal Music.	Linear Drawing.	Girls' Needlework.	Other Studies.
	1st class, (lowest).	2nd class.	3rd class.	4th class.	5th class.															
145	100	64	90	89	102	288	119	125	84	11	252	8	1	7	4	26	186	.....	.....	.....
146	97	94	133	93	50	299	234	305	41	28	230	7	.....	8	3	.....	.....	.....	.....	.....
147	20	35	67	21	30	118	81	118	.....	6	125	30	.....	.....	.....	.....	.....	.....	.....	.....
148	37	31	54	43	.....	128	117	117	.....	12	117	.....	.....	.....	.....	.....	.....	.....	.....	.....
149	117	118	74	77	65	451	216	216	27	38	451	14	12	6	1	12	451	6	.....	.....
150	69	77	62	92	28	245	103	109	32	.....	191	26	.....	.....	.....	.....	.....	.....	.....	.....
151	25	22	21	27	37	88	37	59	29	10	88	12	.....	.....	.....	.....	.....	.....	.....	.....
152	136	107	145	68	54	385	146	217	75	49	370	13	5	18	3	24	265	100	.....	.....
.....	4790	4010	4900	3949	2919	15005	8527	10637	1635	2361	14470	658	239	515	199	373	4836	598	453	1173
153	76375	62620	71848	64579	65028	214212	95433	120426	64258	46639	207371	9929	3227	5771	2812	4754	34771	2393	2011	4554
154	9117	5240	5380	4298	2629	21863	11619	29778	6445	5888	18661	797	1216	1639	511	1136	14284	950	5420	1306
155	9838	7269	8017	5818	4093	27847	15865	21450	5546	6188	23719	1044	742	1471	413	786	9981	1143	1321	1287
156	4790	4010	4900	3949	2919	15005	8527	10637	1635	2361	14470	658	239	515	199	373	4836	598	453	1173
.....
157	100320	79139	93145	78644	74669	278927	131444	173351	77884	61076	266221	12428	5424	9396	3936	7049	63872	5084	9205	8320
158	97583	77914	91181	77117	73536	265056	127066	166025	76085	60800	254486	11915	4645	8575	3870	8286	53882	5882	9200	6360
.....
159	2737	1225	1964	1527	1133	12971	4378	7326	1799	276	11735	513	779	821	66	.....	9990	.....	5	1960
160	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1237	.....	798	.....	.....

NOTE.—Tables A, B, C, D, E, contain the Statistics of Separate Schools incorporated with those of Common Schools; they are, however, reported separately in Table F. The total number of "Pupils attending School" is sometimes given as greater than the "School Population between 5 and 16." This is caused by non-residents, and persons over 16 attending School.
The total number of "Children not attending any School whatever" is very incompletely reported. It is a difficult matter to obtain the information.

TABLE C.—The Common

COMMON SCHOOL

TOTALS.	TOTAL.			RELIGIOUS DENOMINATIONS.												
	Com. School Teachers.	Male.	Female.	Church of England.	Church of Rome.	Presbyterian.	Methodist.	Baptist.	Congregationalist.	Lutheran.	Quaker.	Christian and Disciple.	Reported as Protestant.	Unitarian.	Other persuasions.	Not reported.
Total Counties	4378	2485	1893	694	435	1389	1324	255	61	18	13	45	99	4	13	28
“ Cities.....	253	66	187	55	74	52	52	5	8	.....	.....	.....	7	.....	.....	.....
“ Towns	340	118	222	75	62	99	77	14	6	1	1	1	1	.....	1	2
“ Villages.....	194	84	110	45	21	49	56	8	1	2	.....	1	10	.....	.....	1
Grand Total, 1870.....	5165	2753	2412	869	592	1589	1509	282	76	21	14	47	117	4	14	31
“ 1869.....	5054	2775	2279	826	566	1573	1470	307	63	18	17	48	105	8	14	39
Increase.....	111	.....	133	43	26	16	39	.....	13	3	.....	.....	12	.....	.....	.....
Decrease.....	.....	22	.....	.....	.....	.....	.....	25	.....	.....	3	1	.....	4	.....	8

Schools of Ontario.

TEACHERS.

Total holding Certificates.	CERTIFICATES.								Number of Scholars who at- tended Normal School with- out obtaining Certificates.	Number of Schools in which Teacher was changed during the year.	Number of Schools having more than one Teacher.	ANNUAL SALARIES.			
	Normal School.		County Board.			Unclassified.	Unqualified.	Certificates annulled.				Highest salary paid.	Lowest salary paid male Teacher.	Male Teacher, without board.	Female Teacher, without board.
	First Class.	Second Class.	First Class.	Second Class.	Third Class.										
4353	177	268	1622	1972	314	25	.....	10	70	601	95	\$ 600	\$ 100	\$ 260	\$ 187
199	69	34	80	15	1	54	.....	.....	.....	18	60	1000	250	597	231
321	46	29	166	74	6	19	.....	.....	2	31	113	1000	225	482	226
188	27	18	93	41	9	6	.....	1	3	17	54	600	264	422	190
5061	319	349	1961	2102	330	104	.....	11	75	667	322	1000	100	450	225
4920	259	342	1819	2117	383	134	.....	11	40	659	304	1300	80	448	226
141	60	7	142	.....	.....	.....	.....	.....	35	8	18	.....	20	2	.....
.....	.....	.....	.....	15	53	30	.....	.....	.....	.....	.....	300	.....	.....	1

TABLE D.—The Common

TOTALS.	SCHOOLS.					SCHOOL HOUSES.															
	Number of School Sec- tions.	Number of Schools open.	Number of Schools closed or not reported.	Number of Free Schools.	Number of Schools partly free and otherwise.	Total Number of School Houses.	KIND.					TITLE.				BUILT DURING THE YEAR.					
							Brick.	Stone.	Frame.	Log.	Not reported.	Freehold.	Leased.	Rented.	Not reported.	Brick.	Stone.	Frame.	Log.	Not reported.	
																					Total.
Total Counties.....	4345	4272	73	4003	269	4296	729	379	1786	1404	6	3889	300	82	25	59	24	70	13	10	176
“ Cities	60	60	.....	60	.....	60	34	12	14	.....	.....	58	2	.....	.....	1	.....	.....	.....	.....	1
“ Towns.....	126	126	.....	93	33	126	62	18	46	.....	.....	101	9	15	1	1	.....	.....	.....	.....	1
“ Villages	108	108	.....	88	20	108	45	19	42	2	.....	102	1	5	.....	.....	.....	.....	.....	.....	.....
Grand Total, 1870.	4639	4566	73	4244	322	4590	870	428	1888	1406	6	4150	312	102	26	61	24	70	13	10	178
“ 1869.	4598	4524	74	4131	393	4553	815	427	1817	1469	25	4078	346	95	34	50	30	68	28	.....	176
Increase	41	42	.....	113	.....	37	55	1	71	.....	.....	72	.....	7	.....	11	.....	2	.....	10	2
Decrease .....	.....	.....	1	.....	71	.....	.....	.....	.....	63	19	.....	34	.....	8	.....	6	.....	15	.....	.....

Schools of Ontario.

SCHOOL VISITS.											LECTURES.			TIME OPEN.		
Total.	Local Superintendents,	Clergymen.	Municipal Councillors.	Magistrates.	Judges and Members of Parliament.	Trustees.	Other persons.	Number of Examinations.	Number of Schools distributing prizes.	Number of Schools holding recitations.	Total.	Local Superintendents.	Other persons.	Number of Schools whose time is reported.	Total number of months and days open, including holidays and vacations.	Average No. of months and days open, including holidays and vacations.
61566	8124	4749	1310	1459	312	15682	29930	6721	1203	2390	2909	2664	245	4180	46385·29	11·03
4432	894	450	95	50	164	822	1957	66	45	54	20	18	2	60	720·	12·
5632	914	989	112	86	33	1195	2303	158	66	70	18	12	6	126	1487·	11·15
4177	516	536	114	110	8	1025	1868	152	31	52	107	70	37	108	1093·27	11·29
75807	10448	6724	1631	1705	517	18724	36058	7097	1345	2566	3054	2764	290	4474	49686·26	11·04
74576	10188	6447	1547	1832	310	18613	35639	6970	1357	2412	3127	2780	347	4433	49291·05	11·04
1231	260	277	84	.....	207	111	419	127	.....	154	.....	.....	.....	41	395·21	.....
.....	.....	.....	.....	127	.....	.....	.....	.....	12	.....	73	16	57	.....	.....	.....

TABLE E.—The Common

NUMBER OF SCHOOLS USING

TOTALS.	No. of Schools reported.			READERS.			SPELLING BOOKS.			ARITHMETICS.			GRAMMARS.				
	No. of Schools opened and closed with prayer.	Schools using the Bible and Testament.		Canadian National.	Irish National.	Various.	Sullivan or National.	Canadian National.	Various.	Irish National.	Sangster's National.	Various.	Sullivan or National.	Lennie.	Bullion.	Davies.	Various.
Total Counties.....	4272	2963	2828	4154	307	83	610	2900	436	172	3973	170	870	994	373	1389	211
“ Cities	60	60	60	44	2	13	8	46	10	.....	50	10	20	18	9	19	.....
“ Towns.....	126	123	119	108	5	13	7	109	12	2	120	8	22	37	12	86	4
“ Villages	108	100	90	97	4	2	9	84	10	1	100	5	13	21	4	63	2
Grand Total, 1870 ...	4566	3246	3097	4403	318	111	634	3139	468	175	4243	193	925	1070	398	1557	217
“ 1869 ...	4524	3127	3002	4387	319	71	2467	1176	220	384	4251	58	571	1686	803	839	368
Increase.....	42	119	95	16	.....	40	.....	1963	248	.....	.....	135	354	.....	.....	718	.....
Decrease .....	.....	.....	.....	.....	1	.....	1833	.....	.....	209	8	.....	.....	616	405	.....	151

Schools of Ontario.

BOOKS, MAPS AND APPARATUS.

[illegible]

TABLE F.—The Roman Catholic

TOTALS.	No. of Separate Schools.	RECEIPTS.					EXPENDITURES.			PUPILS AND TIME.		
		Amount of the Legislative Grant paid in 1870.	Legislative apportionment for maps, apparatus, prizes and libraries.	Amount raised from School Rate on supporters.	Amount subscribed by supporters and other sources.	Total amount received.	Amount paid to Teachers.	Amount paid for maps, apparatus, prizes and libraries, including 100 per cent.	Amount paid for other purposes.	Number of pupils.	Number of months open.	Average attendance.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.			
Total Counties...	105	2851 90	27 00	12194 61	4790 77	19864 28	14842 20	194 60	4827 48	6338	10	2692
“ Cities	21	3342 00	441 85	7605 98	6222 70	17612 53	11827 37	935 50	4849 66	7347	12	3950
“ Towns.....	25	2233 00	214 19	9666 03	5208 57	17321 79	12009 37	632 80	4679 62	5658	12	2842
“ Villages ...	12	480 00	.....	2379 00	843 06	3702 06	3059 90	4 00	638 16	1309	11	551
Grand Total, '70.	163	8906 90	683 04	31845 62	17065 10	58500 66	41738 84	1766 90	14994 92	20652	11	10035
“ '69.	165	8730 00	475 66	31443 43	16102 45	56751 54	38628 89	1439 64	16683 01	20684	11	8331
Increase.....	.....	176 90	207 38	402 19	962 65	1749 12	3109 95	327 26	.....	.....	.....	1704
Decrease	2	.....	.....	.....	.....	.....	.....	.....	1688 09	34	.....	.....

Separate Schools of Ontario.

TEACHERS.					RELIGIOUS EXERCISES.		NUMBER OF PUPILS IN THE DIFFERENT BRANCHES OF INSTRUCTION.												MAPS, APPARATUS, &c.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Number of Teachers.		Male.		Female.		RELIGIOUS ORDERS.		Number of schools opened and closed with prayer.		Number of schools using the Bible.		Number of pupils learning Reading.		Writing.		Arithmetic.		Grammar.		Geography.		History.		Book-keeping.		Algebra.		Geometry.		Natural Philosophy.		Music.		Number of maps.		Number of schools using maps.		Apparatus.		Blackboards.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
97	32	65	..	4	77	16	6090	3487	3479	1287	1845	770	143	22	32	50	391	257	55	8	79																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												</

TABLE G.—The

No.	SCHOOLS.		MONEYS.						
	GRAMMAR SCHOOLS.	COUNTIES.	RECEIPTS.						
			Balances from 1869.	Legislative Grant.		Local Sources.			Total receipts for 1870.
				For masters' salaries.	For maps, prizes, &c.	Municipal Grants.	Fees.	Balances and other sources	
			\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1	Arnprior	Renfrew		303 00		401 75	56 50		761 25
2	Barrie	Simcoe		604 00	12 11	400 00	473 00		1489 11
3	Beamsville	Lincoln	1 86	241 00	11 75	275 00		120 00	649 61
4	Belleville	Hastings	79 35	793 00	5 00	1200 00	4 00		2081 35
5	Berlin	Waterloo		395 00		665 00		55 51	1115 51
6	Bowmanville	Durham		897 00	29 00	830 00	240 00		1996 00
7	Bradford	Simcoe	63 88	265 00		400 00	72 00		800 88
8	Brampton	Peel		465 00	18 86	485 00		18 86	987 72
9	Brantford	Brant	91 53	460 00		290 00	565 75		1407 28
10	Brighton	Northumberland	25 56	358 00	10 00	400 00		0 19	793 75
11	Brockville	Leeds	151 33	176 00		600 00			927 33
12	Caledonia	Haldimand	142 77	411 00	45 55	222 01	68 11	26 91	916 35
13	Carleton Place	Lanark	378 06	233 00	20 00	505 00		22 25	1158 31
14	Cayuga	Haldimand		301 03		200 00		151 99	652 99
15	Chatham	Kent	432 86	544 00		375 00	459 00		1810 86
16	Clinton	Huron	6 06	403 00	30 00	500 00	218 00		1157 06
17	Cobourg	Northumberland	146 02	1241 00	6 25	50 00	1191 50	737 10	3371 87
18	Colborne	do	0 50	717 00	28 50	17 60		540 06	1303 66
19	Collingwood	Simcoe	54 16	368 00	10 00	450 00	79 00		961 16
20	Cornwall	Stormont		347 00	27 06	(e)200 00	(e)100 00	(e)200 00	(e)874 06
21	Drunmondville	Welland	52 90	470 00		235 00	347 50		1105 40
22	Dundas	Wentworth		1129 00		846 75	257 55		2233 30
23	Dunnville	Haldimand	+68 62	466 00	13 00	450 00			997 62
24	Elora	Wellington	18 20	292 00		310 00			620 20
25	Farmersville	Leeds		581 00		150 00		140 00	871 00
26	Fergus	Wellington	58 51	233 00	10 00	300 00	104 50		706 01
27	Fonthill	Welland		726 00		355 00	420 00		1501 00
28	Galt	Waterloo	1383 46	1756 00		900 00	1819 17	50 00	5908 63
29	Gananoque	Leeds		374 00		330 00			704 00
30	Goderich	Huron	414 54	479 00	25 00	500 00	392 00	9 00	1819 54
31	Grimsby	Lincoln	43 38	490 00	12 00	175 00	225 70	105 99	1052 07
32	Guelph	Wellington		634 00		680 18	108 75	309 76	1732 69
33	Hamilton	City	26 85	1737 00	141 72	800 00	1815 38	662 00	5182 95
34	Ingersoll	Oxford		389 00		(e)200 00	(e)200 00		(e)789 00
35	Iroquois	Dundas		735 00		200 00	228 00	167 00	1330 00
36	Kemptville	Grenville	132 35	441 00	20 00	250 00			843 35
37	Kincardine	Bruce		322 00	7 00	751 03			1081 03
38	Kingston	City	188 32	1268 00	84 10	638 00	1235 86	384 58	3798 86
39	Lindsay	Victoria		539 00		200 00	27 00	167 50	933 50
40	London	City	547 05	673 00			288 50	640 83	2149 38
41	L'Orignal	Prescott	66 57	346 00	10 00	300 00		10 00	732 57
42	Manilla	Ontario		440 00	35 02		60 50	466 85	1002 37
43	Markham	York	107 73	533 00	30 00	300 00	268 67	11 61	1251 01
44	Metcalfe	Carleton		206 00		150 00		94 00	450 00
45	Milton	Halton		225 00	10 00	300 00	78 00	80 00	693 00
46	Morrisburgh	Dundas		369 00	10 00	281 00			660 00
47	Mount Pleasant	Brant		300 00	34 50	100 00		416 50	851 00
48	Napanee	Lennox	0 80	936 00		550 00			1486 80
49	Newburgh	Addington		717 00		434 03			1151 03
50	Newcastle	Durham	125 00	491 00	25 35	250 00	188 00		1079 35
51	Newmarket	York		384 00		300 00	500 00		1184 00
52	Niagara	Lincoln		300 00		475 00	200 00		975 00
53	Norwood	Peterborough	261 79	405 00	20 00	180 00		1088 89	1955 68
54	Oakville	Halton		203 00		668 39			871 39
55	Oakwood	Victoria		254 00		100 00			354 00

(c) Estimated.

† This balance includes \$50 due from Municipality, but entered as received in account of 1869.

Grammar Schools.

MONEYS.						PUPILS AND TERMS OF ADMISSION.	
EXPENDITURE.						Number of Pupils attending during 1870.	Fees per term of three months per pupil.
Masters' salaries.	Building, rent and repairs.	Maps, prizes and libraries.	Fuel, books and contingencies.	Total expenditure for 1870.	Balance over.		
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.		
648 00	60 00	5 00	48 25	761 25		36	45 cents.
1377 00	12 50	24 22	62 75	1476 47	12 64	67	\$4.
620 30		23 50	5 61	649 41	0 20	28	Free.
1414 50	16 16	10 00	221 98	1662 64	418 71	118	Free.
1100 00	5 70		9 81	1115 51		52	
1800 00		58 00	138 00	1996 00		110	55 to 30 cents.
686 50	1 20		86 50	774 20	26 68	43	75 cents.
950 00		37 72		987 72		94	Free.
1040 52	201 88		129 97	1372 37	34 91	58	\$4 50.
700 00		20 00	46 83	766 83	26 92	75	Free.
875 25		15 00		890 25	37 08	88	Free.
825 25		91 10		916 35		57	25 cents.
583 33	251 49	40 00	48 75	923 57	234 74	53	Free.
602 00			50 99	652 99		50	Free.
1275 00	56 78		112 56	1444 34	366 52	96	\$4, \$3, \$2.
850 00	80 00	61 40	70 13	1061 53	95 53	52	\$2.
2845 58	222 91	12 60	136 89	3217 98	153 89	144	\$3 50.
1090 00		57 00	6 50	1153 50	150 16	90	Free.
825 00	62 43	30 00	43 73	961 16		28	\$3, \$2.
(e)750 00	(e)50 00	(e)54 12	(e)19 94	(e)874 06		33	
878 75	43 71		85 64	1008 10	97 30	64	\$2 50.
1600 00	128 09	25 00	119 98	1873 07	360 23	128	75 cents.
812 00	45 00	28 00	32 00	917 09	80 53	70	Free.
542 00			35 08	577 08	43 12	35	
600 00	95 00	11 00	163 00	871 00		77	Free.
578 50	12 12	20 00	42 09	652 71	53 30	39	
1201 00	110 00		190 00	1501 00		89	\$3 50.
4121 40	384 00	89 11	263 32	4857 83	1050 80	170	\$4.
600 00	17 00		87 00	704 00		59	Free.
1054 90	29 75	50 00	107 32	1241 97	577 57	77	\$2.
985 17		24 35	42 55	1052 07		47	\$2.
1300 00	100 83	8 00	323 86	1732 69		88	75 cents.
3533 44	22 44	283 44	253 38	4032 70	1090 25	209	\$4, \$2.
(e)750 00		(e)20 00	(e)19 00	(e)789 00		67	75 cents.
1075 00	157 87		97 13	1330 00		110	\$2, \$1.
691 00	13 72	40 00	26 23	770 95	72 40	49	Free.
600 00	127 56	*210 00	85 04	1022 60	58 43	71	Free.
3141 86	148 00	176 67	331 57	3798 10	0 76	117	\$4 50, \$3 50.
808 50	25 00	20 00	80 00	933 50		56	Free.
2097 05				2097 05	52 33	71	\$1 50.
600 00		20 00		620 00	112 57	48	Free.
920 82		70 04	11 51	1002 37		46	\$3 to \$1.
687 80	48 19	65 00	41 85	842 84	408 17	61	\$2.
450 00				450 00		27	Free.
603 00	30 00	30 00	30 00	693 00		35	\$3.
600 00		20 00	40 00	660 00		63	Free.
520 00		69 00	262 00	851 00		50	Free.
1175 01	103 88		202 68	1481 57	5 23	163	Free.
1080 35			70 68	1151 03		139	Free.
800 00	100 00	50 70	128 65	1079 35		62	\$1.
1119 50	13 17		51 33	1184 00		60	\$4.
829 00	36 00	30 00	80 00	975 00		31	\$4.
1196 20	152 42	40 00	115 12	1503 74	451 94	76	Free.
761 13	27 00		83 26	871 39		54	Free.
354 00				354 00		57	Free.

* Includes scholarship.

TABLE G.—The Grammar

No.	SCHOOLS.		MONEYS.						
	GRAMMAR SCHOOLS.	COUNTIES.	RECEIPTS.						
			Balance from 1869.	Legislative Grant.		Local Sources.			Total receipts for 1870.
				For masters' salaries.	For maps, &c.	Municipal Grant.	Fees.	Balances and other sources.	
			\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
56	Omemees.....	Victoria.....	6 44	754 00		200 00	22 00		982 44
57	Orangeville.....	Wellington.....		303 00		+339 73			642 73
58	Osborne.....	Russell.....		155 00		300 00		24 00	479 00
59	Oshawa.....	Ontario.....		943 00		1301 00			2244 00
60	Ottawa.....	City.....	358 97	1176 00	28 00	650 00	1904 33	103 46	4220 76
61	Owen Sound.....	Grey.....		554 00	92 00	646 00		92 00	1384 00
62	Pakenham.....	Lanark.....		295 00	36 20			341 48	672 68
63	Paris.....	Brant.....		581 00		337 47		193 00	1111 47
64	Pembroke.....	Renfrew.....		292 00	5 00	247 00	93 00		637 00
65	Perth.....	Lanark.....		887 00		480 00	343 12		1710 12
66	Peterborough.....	Peterborough.....		1512 00	5 00	756 00		6 00	2279 00
67	Pictou.....	Prince Edward.....	247 64	403 00	29 00	1200 00	6 93	5 33	1891 90
68	Port Dover.....	Norfolk.....	40 00	301 00	33 00			199 00	573 00
69	Port Hope.....	Durham.....		811 00		413 98	591 00		1815 98
70	Port Perry.....	Ontario.....		499 00				276 00	775 00
71	Port Rowan.....	Norfolk.....	28 05	337 00	22 00			250 00	637 05
72	Prescott.....	Grenville.....	127 92	496 00	10 50	320 00	110 00		1064 42
73	Renfrew.....	Renfrew.....	0 27	333 00	21 50	346 08			700 85
74	Richmond.....	Carleton.....	24 00	252 00		(e)200 00	(e)70 00		(e)546 00
75	Richmond Hill.....	York.....		402 00		300 00			702 00
76	Sarnia.....	Lambton.....		244 00	20 00	692 50	40 00		996 50
77	Scotland.....	Brant.....		349 00	18 00	100 00	591 35		1058 35
78	Simcoe.....	Norfolk.....		704 00		494 55	26 00	180 00	1404 55
79	Smith's Falls.....	Lanark.....	30 74	405 00		400 00	94 25		929 99
80	Smithville.....	Lincoln.....	28 50	374 00		175 00	140 00		717 50
81	Stirling.....	Hastings.....	32 20	265 00		378 90			676 10
82	Stratford.....	Perth.....	88 36	577 00		500 00			1165 36
83	Strathroy.....	Middlesex.....		354 00		305 50			659 50
84	Streetsville.....	Peel.....	171 55	484 00	14 00	280 00		57 67	1007 22
85	St. Catharines.....	Lincoln.....	63 89	1238 00	25 00	750 00	862 16	28 00	2967 05
86	St. Marys.....	Perth.....		594 00		400 00	12 25	363 75	1370 00
87	St. Thomas.....	Elgin.....		241 00		400 00	35 50	167 27	843 77
88	Thorold.....	Welland.....		475 00	24 00	238 50	100 00	259 00	1096 50
89	Toronto.....	City.....	4646 64	1239 00	25 96	5200 00	1231 08	4190 30	16532 98
90	Trenton.....	Hastings.....		408 00	38 00	347 50			793 50
91	Uxbridge.....	Ontario.....	91 24	666 00	41 00	225 00			1023 24
92	Vankleekhill.....	Prescott.....		394 00	8 10	300 00	78 00	33 00	818 10
93	Vienna.....	Elgin.....		395 00		253 05			648 05
94	Wardsville.....	Middlesex.....	160 61	525 00		247 00	18 00		950 61
95	Waterdown.....	Wentworth.....	51 58	336 00	45 00	252 00	66 75	255 85	1007 18
96	Welland.....	Welland.....		333 00		166 50		1266 00	1765 50
97	Weston.....	York.....		489 00		300 00	383 25		1172 25
98	Whitby.....	Ontario.....		1371 00	60 23	961 48	63 00		2455 71
99	Williamstown.....	Glengarry.....	300 00	447 00		250 00	42 50	27 12	1066 62
100	Windsor.....	Essex.....	22 00	475 00	5 00	315 75			817 75
101	Woodstock.....	Oxford.....		662 00		500 00	159 57		1321 57
101	Grand Total, '70.....		11590 61	*54695 00	1348 26	43597 23	19375 98	15000 61	145607 69
101	" " '69.....		10083 78	52103 00	789 64	35403 40	16924 28	10789 36	126093 46
	Increase.....		1506 83	2592 00	558 62	8193 83	2451 70	4211 25	19514 23
	Decrease.....								

(e) Estimated.

* There was also paid to 10 Meteorological Stations, for services in 1869, \$1230, and, 1870, \$1575.

† A portion of the Municipal Grant of 1870 appeared in the account of 1869.

Schools.—Continued.

MONEYS.						PUPILS AND TERMS OF ADMISSION.	
EXPENDITURE.						Number of pupils attending during 1870.	Fees per term of three months per pupil.
Masters' salaries.	Building, rent and repairs.	Maps, prizes and libraries.	Fuel, books and contingencies.	Total expenditure for 1870.	Balance over.		
\$ cts.	\$ cts.	\$ sts.	\$ cts.	\$ cts.	\$ cts.		
700 00	66 00	25 00	130 65	921 65	60 79	81	Non. res. \$2, res. free.
550 00	50 00		42 73	642 73		50	Free.
400 00			24 00	424 00	55 00	33	Free.
1400 00	632 00		212 00	2244 00		111	Free.
3557 06	306 76	113 40	243 54	4220 76		106	\$8, \$6.
1200 00		184 00		1384 00		64	Free.
540 00	30 35	72 40	29 93	672 68		32	Free.
1000 00	8 66		102 81	1111 47		57	\$3 non-residents.
600 00	10 00	10 00	17 00	637 00		30	\$1 50.
1597 12			113 00	1710 12		98	\$4.
2000 00	134 00	10 00	135 00	2279 00		198	\$1 50 and 75 cents.
1300 00	10 32	58 00	121 74	1490 06	401 84	85	Free.
450 00	50 00	66 00	7 00	573 00		43	Free.
1450 00	9 81		356 17	1815 98		92	\$5 to \$2.
775 00				775 00		70	Free.
375 00		44 00	37 00	456 00	181 05	52	Free.
850 00	2 25	30 50	143 69	1026 44	37 98	80	75 cents.
600 00	19 92	43 00	37 93	700 85		53	Free.
(e)500 00	(e)20 00	(e)20 00	(e)6 00	(e)546 00		40	45 cents.
650 00			52 00	702 00		51	Free.
900 00		40 00	56 50	996 50		29	75 cents.
504 50	404 00	36 00	113 85	1058 35		63	Free.
1200 00		15 00	189 55	1404 55		80	\$3 non-residents.
700 00	25 00		81 15	806 15	123 84	58	\$1 50 non-res., 75 cents res.
664 00			11 00	675 00	42 50	46	\$2.
600 00	3 35		57 75	661 10	15 00	48	Free.
800 00	8 54	10 00	138 76	957 30	208 06	59	Free.
600 00	12 00	5 00	42 50	659 50		84	Free.
920 22	38 00	28 00	21 00	1007 22		65	
2315 21	300 00	78 00	180 10	2873 31	93 74	89	\$3 and \$2.
1250 00		20 00	100 00	1370 00		80	\$2 non-res., free res.
725 00	20 00		98 77	843 77		68	Free.
860 00	105 00	48 50	83 00	1096 50		88	75 cents.
2731 66	13527 28	75 54	198 50	16532 98		150	\$5 50, \$4 50.
700 00	17 50	76 00		793 50		54	Free.
720 00	54 63	82 00	55 17	911 80	111 44	89	Free.
772 00		16 20	29 90	818 10		62	\$3 out of county.
600 00			48 05	648 05		45	Free.
760 61				760 61	190 00	63	25 cents.
600 00	72 00	90 00	32 82	795 72	211 46	54	75 cents.
750 00	990 00		25 50	1765 50		44	Free.
884 85	217 40		70 00	1172 25		67	\$2 50.
1909 75	83 82	120 46	341 68	2455 71		197	\$2.
736 62	59 85		34 58	831 05	235 57	60	\$2 50 non-residents.
800 00		17 75		817 75		72	Free.
1129 00	108 97		83 60	1321 57		74	\$1.
10515 21	20390 11	3374 72	8648 47	137566 51	8041 18	7351	
97009 42	7378 46	1892 49	8222 48	114502 85	11590 61	6608	
8143 79	13011 65	1482 23	425 99	23063 66		743	
					3549 43		

The total grant paid was, therefore, \$57,500.

TABLE H.—The

NUMBER OF PUPILS IN THE VARIOUS BRANCHES OF

GRAMMAR SCHOOLS.	IN ENGLISH.					IN LATIN.								
	Total in English.	In English Grammar.	In Spelling and Dictation.	In Reading.	In Composition.	Total in Latin.	In Harkness or Arnold.	In Latin Grammar.	In Latin Exercises and Prose Composition.	In Prosody.	Reading Caesar.	Reading Virgil.	Reading Livy.	
Arnprior	36	36	36	36	36	36	36	36	36	7	10	6	.....
Barrie	67	67	67	67	.....	64	26	64	12	6	8	8	5
Beamsville	28	28	27	27	28	27	27	1	1	1	1	1	.....
Belleville	118	118	118	118	45	104	94	80	46	8	10	8	.....
Berlin	52	.....	52	52	.....	49	44	.....	1	.....	4	1	.....
Bowmanville	110	110	110	110	110	110	69	30	7	.....	8	8	.....
Bradford	43	43	43	43	.....	30	27	9	.....	6	1	1	.....
Brampton	94	94	94	94	74	87	74	17	13	7	6	6	4	
Brantford	58	58	58	58	58	58	45	58	5	.....	9	9	.....
Brighton	75	75	75	75	75	63	16	41	.....	2	1	1	.....
Brockville	88	88	88	88	.....	70	60	10	.....	4	6	.....	.....
Caledonia	57	57	57	57	57	34	29	34	6	6	6	6	.....
Carleton Place	53	48	50	53	26	22	22	22	22	6	3	3	.....
Cayuga	50	50	50	50	20	43	22	25	6	3	3	3	.....
Chatham	96	96	96	96	96	72	72	72	72	13	15	10	2	
Clinton	52	52	52	52	52	42	42	52	4	4	4	4	.....
Cobourg	127	105	79	79	92	141	114	26	12	19	26	19	.....
Colborne	90	90	90	90	70	90	90	20	12	4	4	4	.....
Collingwood	28	28	28	28	.....	28	.....	.....	.....	.....	.....	.....	.....
*Cornwall	33	33	33	23	.....	32	12	.....	18	8	8	13	7
Drummondville	64	64	.....	64	.....	64	42	22	22	10	12	4	2
Dundas	128	128	128	128	21	128	110	110	18	15	7	11	.....
Dunnville	70	70	70	70	30	66	66	13	.....	.....	.....	.....	.....
Elora	32	32	32	32	11	32	12	15	11	5	6	9	1	
Farmersville	77	77	77	20	77	76	71	50	15	3	2	2	.....
Fergus	39	39	39	39	1	38	35	38	1	3	2	2	.....
Fonthill	80	79	54	57	54	87	81	87	27	17	24	17	8	
Galt	170	170	170	170	120	170	57	151	35	6	14	20	6	
Gananoque	59	59	59	59	.....	46	42	46	5	5	13	10	3
Goderich	77	77	77	77	61	54	37	54	24	17	13	10	.....
Grimsby	47	47	47	47	47	47	26	47	5	10	10	18	3	
Guelph	88	88	88	88	88	87	68	32	32	20	18	18	3	
Hamilton	209	209	209	209	209	148	111	148	148	37	19	11	.....
Ingersoll	67	67	67	67	.....	54	42	.....	.....	10	.....	.....	.....
Iroquois	110	110	95	110	110	102	99	102	2	3	3	3	2	
Kemptville	49	49	49	49	49	49	41	49	27	9	1	1	.....
Kincardine	71	71	71	71	18	27	27	15	6	5	1	1	.....
Kingston	117	117	117	117	116	117	53	117	117	75	37	29	14	
Lindsay	56	56	56	56	56	51	45	15	20	10	5	6	.....
London	71	71	71	71	65	71	54	71	33	12	10	5	6	
L'Orignal	48	48	48	48	30	48	48	48	48	5	5	1	.....
Manilla	46	46	46	46	37	46	46	4	46	2	1	1	.....
Markham	61	61	61	61	60	61	61	61	24	1	5	2	.....
Metcalfe	19	19	19	19	19	19	17	6	17	2	2	2	.....
Milton	35	35	35	35	35	33	25	33	8	8	2	2	.....
Morrisburgh	63	63	63	63	26	63	59	14	.....	.....	4	.....	.....
Mount Pleasant	50	50	50	27	50	47	39	47	2	1	7	2	.....
Napanee	163	163	150	163	.....	141	141	141	104	10	11	10	2
Newburgh	139	139	139	139	60	125	100	125	9	7	18	7	1	
Newcastle	62	62	62	62	62	62	50	12	12	6	7	3	.....
Newmarket	60	60	60	60	29	50	50	50	50	2	2	2	.....
Niagara	31	31	31	9	31	28	24	28	28	6	7	6	.....
Norwood	76	76	76	76	8	76	62	7	15	8	6	6	1	
Oakville	54	54	54	54	54	34	33	34	34	1	1	1	.....

* No report—figures from last year.

Grammar Schools.

INSTRUCTION AND MISCELLANEOUS INFORMATION.

				IN GREEK.								IN FRENCH.					
Reading Ovid.	Reading Cicero.	Reading Horace.	In Verse Composition.	Total in Greek.	In Harkness.	In Greek Grammar.	In Written Exercises.	Reading Lucian.	Reading the Anabasis.	Reading the Iliad.	Reading the Odyssey.	Total in French.	In French Grammar.	In Written Exercises and Composition.	In French Dictation and Conversation.	Reading Voltaire's Chas. XII.	Reading Corneille's Hor. acc.
	2			3	3	3	3		2			26	26	26	26	11	7
	4	6		3	3	3	3	4	3	5	3	40	40	40		6	5
	1			1	1	1	1	1	1			13	13	13		6	
		4		3	3	3	3					26	26	26		1	
	1			3	3	3	3	1		1		9		9		2	
	6			12	5	7	12	4	5			48	27	27	27	27	
				1	1	1	1	1	1			7	7	7		1	
2	5	4	2	12	7	5	5	3	5	3	5	28	7	7	10	12	7
	1	4		6	6	6	6	5				17	17	7		8	
				3	3	3	3			1		12	5	5		4	
		4		3	3	3	3			3		80	80	70		10	
6	6	6		3	3	3	3	3		3		42	42	42		35	7
		2		2	2	2	2	2	2			14	14	14		3	
3	3	3		3	3	3	3	1				10	10	4		4	3
12	10	12	12	6	4	4	6	12	6	6	2	68	68	68	68	12	3
	2	3		6	4	4		12	2			25	25			11	5
	5			59	21	22	21	1	16		1	25	25	23	5		2
		1		3	3		3					12	12	2	2	4	2
	1	1		5		5						17	17	4	4	4	
			8	10	10	5	5					9	9	9			
	2	2		10	8	12	12	1	2	1		16	16	16		5	
1	15	15	11	18		7		6	6	2	2	42	42	42	12	12	12
		3		5		1	4	3		4		18	18	18	10	5	
												18	10	8		6	3
												12	8	6	2	2	2
	1			5	3	5		1	1	1		22	22	22		12	2
8	10	8	2	12	12	3	9	7	9	7	2	30	30	30	8	26	6
6	6	6	170	59	21	59	6	6	6	6	6	122	122	6	55	41	6
				1	1							43	43	43		7	3
1		4		3				3	3			31	31	20		1	1
	9	3		8	2	8			6	2		3	3			3	
3	29	20		21	21	16	21	16	8	16	4	36	36	36	16	16	10
36	22	14		16		16		11	6	6	4	99	99	99	80	25	25
		2		3	3							27		15		2	
				3	3	3	3					12	9	12		3	
	9			3	2	3	2	1	1			9	9	9		2	
	4			4		4						38	38	30			
	7	7	29	35	21	35	35		22	7		50	41	41	15	15	9
												51	20	40		11	
3	6	1	3	15	8	15	8	7	7	3		17	17	17	3	3	
				5	5	5						12	13	4			
	1			5	3	2	3	1		1		7	6	6		1	
	1			2	2	1	2	1				22	3	22		2	
				1								4					
				5	4	5			1			8	8				
		1		1	1							14	14	14	4	1	
												13	8	5	13	5	
				8	8	8	8	4	5			54	54	54		7	
10	7	3		9	9	9	9	2	9	2	1	15	15	15	10	4	1
		2		3	3			3				10	10	10	10	10	5
		2		3	3	1	3	1				24	24	24	15	9	3
		4	4	5	5	5	5		5			7	7	7	2	7	
				3	2	2	2		1	1		15	15	15	10	2	2
				10	9	10	10					19	19	19	19	8	

TABLE H.—The Grammar

NUMBER OF PUPILS IN THE VARIOUS BRANCHES OF

GRAMMAR SCHOOLS.	IN ENGLISH.					IN LATIN.							
	Total in English.	In English Grammar.	In Spelling and Dictation.	In Reading.	In Composition.	Total in Latin.	In Harkness or Arnold.	In Latin Grammar.	In Latin Exercises and Prose Composition.	In Prosody.	Reading Caesar.	Reading Virgil.	Reading Livy.
Oakwood.....	57	57	57	57	32	50	40	.....	81	27	12	27	2
Omemece.....	81	81	81	81	81	81	69	81	27	12	27	8	2
Orangeville.....	50	50	47	45	20	50	15	50	2	3	1	3	2
Osborne.....	32	32	32	32	16	25	25	4	4	1	2	1	.....
Oshawa.....	111	111	111	111	56	108	101	108	108	7	.....	7	7
Ottawa.....	106	106	106	80	106	96	96	96	96	13	23	14	3
Owen Sound.....	64	64	64	64	64	55	46	18	.....	18	9	7	2
Pakenham.....	31	27	26	27	.....	31	31	8	30	.....	.....	1	.....
Paris.....	57	57	57	57	57	57	57	57	57	6	12	6	2
Pembroke.....	30	30	30	30	27	30	22	8	8	1	8	1	.....
Perth.....	98	98	98	98	40	98	72	98	8	5	18	12	2
Peterborough.....	198	198	198	198	46	198	71	50	10	.....	4	40	4
Pictou.....	85	85	85	85	85	85	78	78	7	1	.....	.....	1
Port Dover.....	43	43	43	43	.....	36	21	.....	10	.....	3	4	.....
Port Hope.....	92	92	92	92	92	92	56	20	5	.....	9	8	.....
Port Perry.....	70	70	70	70	70	70	68	.....	.....	.....	2	.....	.....
Port Rowan.....	51	51	51	43	26	52	28	16	5	3	5	3	.....
Prescott.....	80	80	80	80	65	80	80	80	12	.....	5	.....	.....
Renfrew.....	53	53	53	53	44	32	32	32	32	.....	7	.....	.....
Richmond.....	40	40	40	40	37	10	10	5	.....	.....	.....	.....	.....
Richmond Hill.....	51	51	51	51	51	51	47	51	51	3	.....	1	2
Sarnia.....	29	29	29	29	29	27	24	27	2	.....	3	.....	.....
Scotland.....	63	63	63	63	63	63	56	.....	.....	.....	3	4	.....
Simcoe.....	80	80	80	80	80	80	80	80	36	8	14	8	2
Smith's Falls.....	58	58	58	58	53	53	48	2	4	2	.....	3	.....
Smithville.....	46	46	46	46	46	46	46	20	6	2	6	2	.....
Stirling.....	48	48	48	48	48	22	.....	22	8	.....	10	.....	.....
Stratford.....	59	59	59	59	.....	56	32	32	19	7	11	9	.....
Strathroy.....	84	84	84	83	.....	44	38	44	1	1	5	.....	.....
Streetsville.....	51	51	51	51	.....	51	45	5	1	.....	5	3	.....
St. Catharines.....	89	89	89	89	89	89	89	89	49	8	.....	12	.....
St. Marys.....	80	80	80	80	80	54	26	54	54	14	10	6	6
St. Thomas.....	68	68	68	68	68	68	59	13	9	.....	3	6	.....
Thorold.....	88	88	88	88	70	88	7	88	7	3	3	3	.....
Toronto.....	150	150	150	150	83	150	130	150	150	13	16	14	6
Trenton.....	33	33	33	33	.....	48	48	6	.....	1	2	1	.....
Uxbridge.....	89	89	89	89	70	87	76	80	70	3	7	3	.....
Vankleekhill.....	62	62	62	38	62	62	62	62	62	3	14	3	.....
Vienna.....	45	45	45	45	45	45	42	45	45	.....	3	.....	.....
Wardsville.....	63	48	54	50	63	48	44	44	4	.....	2	2	.....
Waterdown.....	54	54	54	54	35	40	25	7	33	3	.....	8	.....
Welland.....	44	44	44	.....	.....	28	23	.....	1	.....	3	.....	.....
Weston.....	67	67	67	67	67	67	29	67	60	14	10	14	3
Whitby.....	197	197	45	197	197	190	120	60	30	45	.....	35	5
Williamstown.....	60	60	60	60	60	60	42	42	12	7	17	7	.....
Windsor.....	72	72	72	72	.....	72	72	35	35	.....	.....	.....	.....
Woodstock.....	68	68	65	34	55	74	71	47	74	.....	2	2	.....
Grand Total, 1870.....	7280	7171	6958	6863	4915	6658	5187	4371	2467	564	632	578	138
“ 1869.....	6491	6463	6067	5924	5015	5577	4146	3884	1996	558	642	580	186
Increase.....	789	708	891	939	.....	1081	1041	487	471	6	.....	.....	.....
Decrease.....	.....	.....	.....	100	.....	.....	.....	.....	.....	.....	10	2	48

Schools.—Continued.

INSTRUCTION, AND MISCELLANEOUS INFORMATION.

Reading Ovid.	Reading Cicero.	Reading Horace.	In Verse Composition.	IN GREEK.								IN FRENCH.					
				Total in Greek.	In Harkness.	In Greek Grammar.	In Written Exercises.	Reading Lucian.	Reading the Anabasis.	Reading the Iliad.	Reading the Odyssey.	Total in French.	In French Grammar.	In Written Exercises and Composition.	In French Dictation and Conversation.	Reading Voltaire's Chas. XII.	Reading Corneille's Horace.
4	4	3	3	2	2	1						20	20				
2	2	3		14	14	14	8	4	4	4	2	37	37	15		13	2
				3	3	3			3	3	1	14	12	12		2	1
4	1			1	1	1	1	1	1	1		10	6	4	4		
				6	5	6	6	1	1	1		56	56			7	7
10	3	14		36	36	36	36	2	11	5	2	52	52	52	52	19	
	2			3	3	3	3	3				34	34	34		16	
2	3	2		3	3	1	3	1		1		26	26	26			2
				5	2	5	5	3		1		23	23	23		5	
				4	4		4		1			14	14	14		5	
	1	5		21	18	21	12	1	10	4		71	71	71		29	7
5	6	8	2	34	9	4		8	4	6	3	96	73			10	3
1	1		2	4	2	4	1	1	1	2	1	43	41	2		2	3
2	2	2		4		4		2	4			6				2	
	5	3		9	5	9	5	5	1	1	1	55	55	53	11	9	2
				3	3							18	18				
	1			2	1	1	1	1	1	1		8	8	8	3	3	
				1	1							63	63	51		3	
				4	4							27	27	27		7	
				8	7	8	8	7	3	1		16	16	3			
	18	3	3	2	2	2						32	32	32		15	
				1	1	1			1	1		11	11	11		2	
7	8	8	2	9	5	9	9	4	6	2	2	17	8		3	6	3
	3	3	1	3	2	3	2	2	1	1		43	43	43	13	13	10
				3	3	1	1		2			23	23	23	23	7	
												19	19	19			
				11	10	10				1		29	29	29			
	1			4	3	1			1			34	3	3	34		
	4	3		3		3		3		2		9	9	9		2	
	8	5		5	3	5	5		5	5		24	24	24		2	
	6	6	6	14	8	14	14	6	6	4		32	32	32	10	10	10
				6	2	4	6		4	4		32	32	7		2	5
				3	2	3	2		2			15	15			4	
	14	14	2	27	20	27	27	10	3	3	2	65	65	65	45	10	1
				2	2							15	15	15			
	1			7	5	7	7	1	2			20	6	2	7	6	1
				13	13	13	13		7			27	27	27	27	15	14
				2	2	2	2					15	15	15		2	
	1	1		3	3	3	3					10	8	2		4	
				3		3	3					13	13	11	1	4	
	5			3		3			1	1		22	22			7	6
3	14	3	3	13	9	13	9	3	4	5	3	10	10	10		2	
8	12	8	5	25	13	12	12	12	7	12	5	170	170	170	120	32	12
				7	7	7			7								
												25	7	25	7		
	2																
129	310	243	260	769	468	579	413	174	248	153	45	2850	2586	2098	786	693	199
95	257	206	129	858	498	553	412	208	253	152	63	2416	2125	1908	506	546	241
34	53	37	131			26	1			1		434	461	190	280	147	
				89	30			34	5		18						42

TABLE H.—The Grammar

NUMBER OF PUPILS IN THE VARIOUS BRANCHES OF

GRAMMAR SCHOOLS.	IN MATHEMATICS.								IN GEOGRAPHY AND HISTORY.				IN		
	Total in Arithmetic.	Total in Algebra.	Total in Euclid.	In the higher rules of Arithmetic.	In the higher rules of Algebra.	In Euclid, books III-IV.	In Trigonometry or Logarithms.	In Mensuration and Surveying.	In Ancient Geography.	In Modern Geography.	Total in History.	In Ancient History.	In Physical Science.	In Christian Morals.	In Civil Government.
Arnprior	36	8	10	34	6	3	.....	.....	6	28	34	6	10	.....	.....
Barrie.....	67	35	23	24	17	12	4	.....	5	67	67	6	.....	.....	.....
Beamsville	28	12	6	28	8	1	.....	.....	1	27	28	9	.....	.....	.....
Belleville	118	52	20	98	36	11	17	12	20	118	118	41	118	118	.....
Berlin.....	52	15	14	48	11	1	7	.....	.....	52	6	.....	.....	.....	.....
Bowmanville	110	80	27	110	60	7	6	.....	47	110	110	40	25	.....	.....
Bradford	43	37	20	43	15	6	.....	5	8	43	42	1	7	.....	.....
Brampton	94	72	35	79	38	7	12	.....	20	94	94	14	40	.....	.....
Brantford	58	19	8	40	12	7	.....	.....	20	58	58	12	6	.....	.....
Brighton	75	15	7	40	6	6	.....	11	3	75	18	.....	.....	.....	.....
Brockville.....	88	78	24	88	49	13	40	49	49	88	88	49	49	.....	.....
Caledonia	57	31	27	57	21	5	1	3	6	57	57	6	17	.....	.....
Carleton Place.....	53	7	11	48	7	6	.....	22	.....	53	52	.....	.....	.....	.....
Cayuga	50	19	28	50	11	3	.....	.....	.....	50	50	3	.....	.....	.....
Chatham	97	72	42	97	52	15	7	30	96	96	96	96	34	.....	.....
Clinton	52	13	18	52	7	7	18	8	.....	42	52	10	.....	.....	.....
Cobourg	90	59	43	50	43	21	.....	.....	26	58	58	20	.....	.....	.....
Colborne	90	30	20	90	10	10	.....	.....	.....	90	60	4	6	.....	.....
Collingwood	28	7	7	.....	3	3	.....	.....	.....	28	28	.....	.....	28	.....
Cornwall	33	15	11	9	2	3	.....	.....	8	23	32	.....	.....	.....	.....
Drummondville	64	39	30	64	30	15	38	.....	6	64	64	14	64	64	.....
Dundas	128	128	92	128	128	16	6	12	22	128	128	22	10	128	.....
Dunnville	70	10	14	70	6	8	.....	1	10	70	17	.....	.....	.....	.....
Elora.....	32	14	13	31	4	4	.....	5	5	27	32	4	32	.....	.....
Farmersville.....	70	24	20	70	18	8	.....	2	.....	50	24	.....	8	.....	.....
Fergus	39	15	11	37	9	11	2	10	.....	38	10	2	.....	.....	.....
Fonthill	89	41	32	79	31	10	3	7	14	43	50	17	7	89	.....
Galt	170	113	91	113	62	31	18	18	18	170	113	18	63	.....	.....
Gananoque	59	26	9	38	11	3	.....	.....	.....	59	59	.....	.....	.....	.....
Goderich	77	13	29	69	13	11	.....	25	.....	77	64	3	.....	77	.....
Grimsby	47	28	23	47	12	11	4	.....	6	46	47	8	10	.....	.....
Guelph	88	85	85	82	38	17	10	10	20	88	88	20	53	88	.....
Hamilton	209	63	34	159	63	34	39	.....	53	209	127	59	33	.....	.....
Ingersoll	67	24	31	67	24	4	.....	6	.....	35	67	34	.....	.....	.....
Iroquois	95	32	12	64	7	6	54	5	6	87	25	.....	8	.....	.....
Kemptville	49	26	12	35	16	7	1	2	9	45	48	1	48	.....	.....
Kincardine	71	21	18	65	9	11	.....	.....	.....	71	50	.....	15	.....	.....
Kingston	117	67	58	97	57	43	43	67	51	117	100	29	48	117	.....
Lindsay	56	25	12	56	5	.....	.....	35	56	56	56	.....	56	.....	.....
London	71	65	15	65	47	9	27	58	24	71	71	24	65	71	.....
L'Orignal.....	48	10	9	32	5	1	16	.....	5	48	48	30	5	.....	.....
Manilla	46	21	21	38	11	10	.....	20	20	46	20	5	11	.....	.....
Markham	61	14	12	59	10	3	.....	7	.....	61	60	6	7	.....	.....
Metcalfe	19	19	12	19	19	.....	.....	.....	.....	19	19	3	.....	.....	.....
Milton	35	10	11	28	10	2	.....	.....	8	35	28	28	.....	.....	.....
Morrisburgh.....	62	27	12	63	21	5	.....	2	.....	62	49	.....	.....	.....	.....
Mount Pleasant.....	50	27	11	50	26	9	5	5	4	50	50	3	27	.....	.....
Napanee	163	45	18	163	30	14	30	6	.....	163	61	21	.....	.....	.....
Newburgh	139	55	20	46	44	7	16	9	7	139	60	17	35	.....	.....
Newcastle	62	15	12	62	9	6	.....	.....	20	62	62	15	18	62	.....
Newmarket	59	29	14	58	29	2	2	.....	45	60	48	11	36	60	.....
Niagara	31	14	14	14	5	4	4	4	28	31	31	31	28	.....	.....
Norwood	76	17	8	40	12	2	.....	.....	7	76	27	8	17	.....	.....

Schools.—Continued.

INSTRUCTION, AND MISCELLANEOUS INFORMATION.

OTHER SUBJECTS.						Schools in which there are daily prayers.	Schools in which the Bible is read.	Schools under United Boards.	Number of Maps in School.	Number of Globes in School.	Number of Pupils who were Matriculated at any University, 1870.	Number of Masters engaged.	Head Masters and their Colleges.
In Writing.	In Book-keeping and Commercial Transactions.	In Drawing.	In Vocal Music.	In Gymnastics.	In Military Drill.								
34	6					1		1	15		2	1	Henry Lloyd Stack, M.A., <i>Lennoxville.</i>
59		13				1			11	2		1	H. B. Spotton, M.A., <i>Toronto.</i>
27	6					1	1	1	9			1	George A. Chase, B.A., <i>Toronto.</i>
118						1	1		8	1		2	Alexander Burdon.
13	16					1			15	1		1	J. H. Thom, M.A., <i>Toronto.</i>
110	40	12				1	1		50	3	1	3	Thomas A. Macintyre, M.A.
43	2					1	1		9		2	1	Robert Dobson, <i>Certificate.</i>
65	16		18			1		1	18	2		2	George Hunter Robinson, B.A.
58	12					1	1		20			2	David Ormiston, B.A., <i>Toronto.</i>
75	14					1	1		7	3	1	1	A. McClatchie, B.A., <i>Victoria.</i>
88	1					1		1	83	1		3	L. Hamilton Evans, B.A., <i>Trinity.</i>
57	22					1	1	1	20	2		2	W. H. Rennelson, M.A., <i>Toronto.</i>
53	10					1	1	1	6			1	Irvin Stuart, B.A., <i>Queen's.</i>
	6					1			15		1	1	Richard Harcourt, B.A., <i>Toronto.</i>
96	41	96					1		34	2	1	2	S. Arthur Marling, M.A., <i>Toronto.</i>
52	8					1			12	2	1	1	James Turnbull, B.A., <i>Toronto.</i>
38	21					1	1		16			4	Rev. James Roy, B.A., <i>Victoria.</i>
50						1		1	15	2	1	2	Alexander Murray, M.A., <i>Aberdeen.</i>
28	4					1	1		9			2	Rev. G. Gemmett, M.A.
32						1			20	1		1	
	52					1	1		24	1	3	1	Rev. J. J. Cameron, M.A., <i>Queen's.</i>
128	4	86				1		1	14	2	3	2	J. Howard Hunter, M.A., <i>Toronto.</i>
70		70				1			10			1	C. W. Colter, A.B., <i>New Brunswick.</i>
32						1	1		23	3	1	1	Rev. John G. Macgregor.
60	8	20				1	1	1	6	1		1	Moses McPherson, B.A., <i>Victoria.</i>
30	13					1						1	James E. Burgess, M.A., <i>Queen's.</i>
80	17		89			1	1		25	2	2	1	Henry De La Matter.
159	31	21		170	170	1			25		3	10	William Tassie, M.A., <i>Toronto.</i>
59	19					1		1					H. H. Ross, B.A., <i>Toronto.</i>
77	12					1			12	2		2	James Preston, B.A., <i>Toronto.</i>
46	8					1	1		14	2		1	Daniel Campbell, <i>Certificate.</i>
88	35	31				1	1	1	20		4	2	J. Murison Dunn, B.A., <i>Toronto.</i>
209	41	78				1		1	24	2	2	5	J. M. Buchan, M.A., <i>Toronto.</i>
67	12					1	1		14	2		1	E. Stone Wiggins, B.A. <i>Albert.</i>
100						1	1		15	2		2	William A. Whitney, M.A., <i>Victoria.</i>
26	16	5							22	2		1	John Wilson Jolly, <i>Certificate.</i>
71	13					1	1		25	1		1	Benjamin J. M. Freer, <i>Certificate.</i>
117	47	7		57	57	1	1		44	2	8	4	Samuel Woods, M.A., <i>Toronto.</i>
56	15						1	1	12	1	1	1	H. Reazin, <i>Certificate.</i>
71	47	71		71	53	1	1	1	30	4		2	Rev. Benjamin Bayly, B.A., <i>Dublin.</i>
48	5					1		1	20	2	1	1	F. F. Macnab, B.A., <i>Queen's.</i>
29	10							1	3	1		2	W. Mortimer Nichols, B.A., <i>Trinity.</i>
61	20	31				1	1		7	3		2	James H. Hughes, M.A., <i>Toronto.</i>
19	4					1		1	10	2		1	Thomas Motherwell, B.A., <i>Lennoxville.</i>
35	10					1	1		24			1	Rev. Nelson Burns, B.A., <i>Toronto.</i>
63	19							1	5			1	P. C. McGregor, B.A., <i>Queen's.</i>
50	12					1	1	1	14	1		1	William Wilkinson, B.A., <i>Trinity.</i>
163	25	22			39	1	1	1	18			2	Rev. D. F. Bogert, B.A., <i>Trinity.</i>
35	50					1	1	1	12	1	2	2	John Campbell, M.A., <i>Victoria.</i>
62		8				1	1	1	6	1		1	W. W. Tamblin, M.A., <i>Toronto.</i>
40	15					1	1		38	2		3	William Walker Anderson, <i>Certificate.</i>
16	24					1			10	1		1	Charles Camidge, <i>Certificate.</i>
56	20					1			12	1		1	John Moore, B.A., <i>Victoria.</i>

TABLE H.—The Grammar

NUMBER OF PUPILS IN THE VARIOUS BRANCHES OF

GRAMMAR SCHOOLS.	IN MATHEMATICS.							IN GEOGRAPHY AND HISTORY.				IN			
	Total in Arithmetic.	Total in Algebra.	Total in Euclid.	In the higher rules of Arithmetic.	In the higher rules of Algebra.	In Euclid, books III-IV.	In Trigonometry or Logarithms.	In Mensuration and Surveying.	In Ancient Geography.	In Modern Geography.	Total in History.	In Ancient History.	In Physical Science.	In Christian Morals.	In Civil Government.
Oakville.....	54	47	36	47	12	1	.....	.....	35	54	54	.....	.....	.....	.....
Oakwood.....	57	18	13	57	18	5	.....	6	.....	57	57	30	.....	.....	.....
Omeme.....	72	28	44	72	18	15	12	12	16	49	72	16	40	81	.....
Orangeville.....	50	11	10	43	7	9	.....	.....	5	45	26	.....	2	.....	.....
Osborne.....	32	15	7	23	4	2	2	1	3	23	7	1	2	.....	.....
Oshawa.....	112	15	12	111	15	5	.....	.....	7	111	118	8	.....	.....	.....
Ottawa.....	106	60	53	44	21	20	30	.....	23	106	106	.....	68	106	.....
Owen Sound.....	64	34	12	64	18	4	.....	10	.....	64	64	.....	.....	64	64
Pakenham.....	31	11	8	31	8	31	.....	.....	4	31	14	7	.....	.....	.....
Paris.....	57	57	18	57	23	6	.....	57	23	57	57	23	35	.....	.....
Pembroke.....	30	12	8	21	5	1	5	4	.....	30	17	7	.....	.....	.....
Perth.....	98	51	36	98	36	12	5	.....	10	98	96	16	9	.....	.....
Peterborough.....	198	100	4	198	68	20	4	.....	99	56	198	28	5	.....	.....
Pictou.....	85	84	35	85	41	5	.....	.....	1	85	85	2	85	.....	.....
Port Dover.....	43	8	8	43	8	2	.....	.....	8	43	43	43	.....	.....	.....
Port Hope.....	92	92	18	92	74	12	.....	.....	40	34	92	26	92	.....	.....
Port Perry.....	70	13	6	61	10	2	7	7	.....	70	70	.....	9	.....	.....
Port Rowan.....	52	7	3	52	3	2	8	.....	12	34	46	3	10	.....	.....
Prescott.....	80	28	2	70	14	.....	.....	.....	1	80	80	1	40	.....	.....
Renfrew.....	53	19	8	52	3	.....	.....	.....	.....	53	27	.....	.....	.....	.....
Richmond.....	40	7	7	20	6	4	.....	.....	.....	40	15	.....	.....	.....	.....
Richmond Hill.....	51	34	35	51	18	10	2	.....	3	51	51	3	6	.....	.....
Sarnia.....	29	24	9	29	11	1	.....	.....	29	29	5	.....	.....	.....	.....
Scotland.....	63	17	9	47	8	3	.....	.....	2	63	63	2	14	.....	.....
Simcoe.....	80	26	14	80	8	10	8	20	40	80	80	23	30	80	80
Smith's Falls.....	58	6	3	58	6	1	1	.....	.....	58	58	.....	3	.....	.....
Smithville.....	46	16	12	42	15	8	1	2	18	46	46	12	8	.....	.....
Stirling.....	48	13	11	36	4	2	.....	.....	.....	30	25	.....	.....	.....	.....
Stratford.....	59	44	20	59	41	12	.....	.....	22	59	59	22	2	.....	.....
Strathroy.....	84	37	16	84	30	4	.....	5	3	78	79	6	6	.....	.....
Streetsville.....	51	7	6	51	2	1	.....	.....	4	51	15	.....	.....	.....	.....
St. Catharines.....	89	15	15	89	15	11	.....	.....	8	89	89	8	.....	.....	.....
St. Mary's.....	81	35	20	80	17	10	15	15	6	80	80	6	.....	.....	.....
St. Thomas.....	68	68	14	68	66	12	.....	26	12	68	68	10	68	.....	.....
Thorold.....	88	38	8	69	15	3	.....	.....	5	83	39	4	.....	.....	.....
Toronto.....	150	98	86	98	58	46	20	20	30	150	110	30	40	150	.....
Trenton.....	48	40	7	38	10	.....	.....	.....	.....	48	48	.....	33	.....	.....
Uxbridge.....	82	20	23	36	4	16	3	4	12	80	76	6	39	.....	.....
Vankleekhill.....	62	50	50	50	45	4	.....	26	43	62	49	23	31	.....	.....
Vienna.....	45	40	10	30	30	5	.....	.....	12	45	45	12	8	.....	.....
Wardsville.....	56	17	14	31	10	8	15	6	18	63	63	28	.....	.....	.....
Waterdown.....	54	20	5	54	5	.....	13	.....	.....	54	54	7	.....	54	.....
Welland.....	44	44	5	5	4	2	.....	.....	44	44	44	44	.....	.....	.....
Weston.....	67	13	15	60	9	5	10	10	13	55	67	5	67	.....	.....
Whitby.....	197	167	109	168	77	31	10	5	58	139	197	51	120	.....	.....
Williamstown.....	55	40	37	55	16	17	50	25	.....	53	40	.....	26	.....	.....
Windsor.....	72	6	4	52	1	.....	.....	.....	6	72	72	3	.....	.....	.....
Woodstock.....	71	35	10	61	29	4	.....	.....	4	60	47	4	34	.....	.....
Grand Total, 1870,.....	7212	3525	2172	6115	2201	855	651	717	1409	6631	5981	1275	1948	1437	144
„ 1869,.....	6442	3061	2053	5420	1848	787	501	429	1368	5680	5218	1070	1681	1487	82
Increase,.....	770	464	119	695	353	68	150	288	41	951	763	205	267	.....	62
Decrease,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	.....

Schools.—Continued.

INSTRUCTION, AND MISCELLANEOUS INFORMATION.

OTHER SUBJECTS.											Number of Pupils who were Matriculated at any Univer- sity, 1870.			Number of Masters engaged.			Head Masters and their Colleges.
In Writing.	In Book-keeping and Com- mercial Transactions.	In Drawing.	In Vocal Music.	In Gymnastics.	In Military Drill.	Schools in which there are daily prayers.	Schools in which the Bible is read.	Schools under United Boards.	Number of Maps in School.	Number of Globes in School.							
54	15	26				1		1	12	1	2	1	Rev. William Lumsden, M.A., <i>Victoria</i> .				
57	6					1	1	1	2	1		1	Alexander Sim, A.M., <i>Aberdeen</i> .				
81	13						1		23	2		2	John Shaw, <i>Certificate</i> .				
45	13						1	1	20	1	1	1	C. A. G. Bunt, M.A., <i>Victoria</i> .				
27	6							1	12	2	1	1	James Lumsden, M.A., <i>Aberdeen</i> .				
111	8					1	1	1	64	4		2	John Seath, B.A., <i>Queen's, Ireland</i> .				
106						1	1		27	2	3	5	J. Thorburn, M.A.				
64	35							1	35			2	Hugh J. Strang, B.A., <i>Toronto</i> .				
24						1		1	12	1	1	1	Abraham Devitt, M.A., <i>Victoria</i> .				
57	15					1	1	1	14			1	J. W. Acres, B.A., <i>Trinity</i> .				
29	8					1		1	2	2		1	James Smith, A.M., <i>Aberdeen</i> .				
98	13					1	1	1	24	1	3	2	Alfred Baker, B.A., <i>Toronto</i> .				
198	66	71				1		1	26	1	2	3	James Byron Dixon, M.A., <i>Wesleyan</i> .				
85	30	40	80			1	1		12	2		2	Edward T. Crowle, M.A., <i>Giessen</i> .				
43						1		1	12	2		1	W. G. Crawford.				
92	24	15				1		1	22	2	1	2	Adam Purslow, <i>Certificate</i> .				
58	8					1	1	1	12	1		1	J. R. Youmans, M.A., <i>Victoria</i> .				
35	5					1	1	1	12	2		1	Henry Barry Houghton, B.A., <i>Dublin</i> .				
78	15					1		1	20	1		1	Rev. George Blair, M.A., <i>Glasgow</i> .				
53	11	50						1	11			1	James William Connor, B.A., <i>Toronto</i> .				
40			40			1		1	5			1	James Christie, A.M., <i>Aberdeen</i> .				
46	18					1	1	1	12	1	2	1	Alfred M. Lafferty, M.A., <i>Toronto</i> .				
29	9	3				1		1	10			1	Francis L. Checkley, B.A., <i>Trinity</i> .				
63	22	22				1		1	20		1	1	William R. Nason, B.A., <i>Toronto</i> .				
74	25		80			1	1	1	26	3	1	3	James J. Wadsworth, M.A., <i>Toronto</i> .				
58	4	12				1		1	12	1	1	1	W. Taylor Briggs, B.A., <i>Trinity</i> .				
46	8								10	2		1	William Cruickshank.				
48	6					1	1	1	10			1	C. F. Wiggins, B.A., <i>King's, Nova Scotia</i> .				
59						1		1	19	1		2	C. J. Macgregor, M.A., <i>Toronto</i> .				
78						1	1	1	24	2		1	Richard W. Young, <i>Certificate</i> .				
51	15					1	1	1	12	2		1	John A. Bell, M.A., <i>Albert</i> .				
89	25					1	1		12	1		4	John King, A.M., <i>Dublin</i> .				
80	20					1	1	1	24	1	3	2	William Tytler, B.A., <i>Toronto</i> .				
68	60			68	30	1	1	1	30	4		2	John Somerville, M.A., <i>Toronto</i> .				
88	22		30			1	1	1	11			3	James Henry Ball, M.A., <i>Trinity</i> .				
140	40	17				1	1		6		1	5	Rev. Arthur Wickson, M.A., <i>Toronto</i> .				
48						1	1	1	8			1	William Bond, B.A., <i>Trinity</i> .				
89	20		12			1	1	1	20	1		1	John Thomson, A.B., <i>Queen's</i> .				
62	20		20			1	1		5	1		1	Andrew Agnew, B.A., <i>Queen's</i> .				
45	20					1	1	1	25	3		1	E. M. Bigg, M.A., <i>Toronto</i> .				
60	20				15	1	1	1	21	2		1	William Sinclair, B.A., <i>Toronto</i> .				
6	20	13	54			1	1	1	14			1	John Nicholson Muir, B.A., <i>McGill</i> .				
						1	1	1	5			1	William Oliver, B.A., <i>Toronto</i> .				
						1			9	2		2	James Hodgson, <i>Certificate</i> .				
100	43	37		50	50	1	1	1	20		12	3	Thomas Kirkland, B.A., <i>Toronto</i> .				
50	20		60			1	1		13		4	1	Alexander Jamieson, B.A., <i>Queen's</i> .				
72	7					1		1	12	2		1	James Johnston, B.A., <i>Toronto</i> .				
36	44	34		16	15	1	1		13	1		2	George Strauchon.				
6399	1636	912	496	431	434	88	60	62	1712	128	81	172					
5669	1539	885	623	616	838	88	57	65	1600	133	87	165					
730	97	27		185	404		3		112			7					
			12					3		5	6						

TABLE I.—Certain Results of Meteorological Observations

	PEMBROKE.	CORNWALL.	BARRIE.	PETERBOROUGH.
BAROMETER. Corrected to 32°, and approximately reduced to sea level.				
	Inches.			
ANNUAL MEAN PRESSURE {				
at 7 A.M.	29.7304	29.8936	29.4748	29.8816
at 1 P.M.	29.7013	29.8669	29.3655	29.8581
at 9 P.M.	29.7074	29.8714	29.4816	29.8895
Mean	29.7130	29.8773	29.4416	29.8734
Highest pressure	30.887	30.597	30.354	30.522
Date of highest pressure	1 p.m. Jan. 14	1 p.m. Jan. 14.	7 a.m. Jan. 14.	7 a.m. Jan. 14.
Highest Monthly mean pressure	29.8839	30.0653	29.7077	30.0447
Month of highest mean pressure	March.	September.	March.	September.
Lowest monthly mean pressure	29.5934	29.7909	29.1467	29.7974
Month of lowest mean pressure	June.	February.	July.	December.
Lowest pressure	28.804	28.964	28.567	28.933
Date of lowest pressure	1 p.m. Jan. 3	7 a.m. Jan. 3.	1 p.m. June 30.	7 a.m. Jan. 3
Annual range	2.083	1.633	1.787	1.589
Greatest monthly range	2.083	1.633	1.294	1.589
Month of greatest range	January.	January.	January.	January.
Greatest daily range (24 hours)	1.318	.984	1.099	.843
Date of greatest range	January 14-15.	January 14-15.	January 14-15.	November 22-23.
TEMPERATURE.				
	°	°	°	°
ANNUAL MEANS {				
at 7 A.M.	37.60	41.99	43.96	40.89
at 1 P.M.	48.15	50.99	52.75	52.31
at 9 P.M.	41.62	43.83	42.90	42.56
Mean	42.46	45.60	46.53	45.25
Mean maximum	53.55	56.25	58.51	56.43
Mean minimum	31.89	34.13	33.87	27.48
Mean range	21.66	22.12	24.64	28.94
Greatest daily range	53.3		47.6	52.4
Day of greatest range	May 29.		October 24.	January 10.
Least daily range	4.0		5.2	10.2
Day of least range	February 9.		December 31.	March 30.
Highest temperature	98.5	97.0	95.6	95.0
Day of highest temperature	June 24.	July 25.	June 27.	June 27.
Lowest temperature	-33.0	-18.7	-15.9	-24.5
Day of lowest temperature	December 14.	February 4.	December 29.	December 30.
Warmest month	June.	July.	June.	June.
Mean temperature of warmest month	70.46	73.76	70.84	71.94
Coldest month	February.	February.	February.	February.
Mean temperature of coldest month	10.35	15.06	17.69	17.30
Warmest day	June 24.	June 28.	June 27.	June 27.
Mean temperature of warmest day	82.83	82.63	83.0	84.03
Coldest day	January 14.	January 14.	January 14.	December 29.
Mean temperature of coldest day	-17.67	-10.86	-0.73	-7.2
TENSION OF VAPOR.				
ANNUAL MEANS {				
at 7 A.M.	.249	.310	.290	.264
at 1 P.M.	.271	.380	.325	.281
at 9 P.M.	.258	.317	.283	.266
Mean	.259	.336	.299	.270
Highest monthly mean tension	.507	.685	.537	.527
Month of highest mean tension	June.	July.	June.	July.
Lowest monthly mean tension	.070	.106	.094	.083
Month of lowest mean tension	February.	January.	February.	February.
HUMIDITY				
ANNUAL MEANS {				
at 7 A.M.	86	89	81	80
at 1 P.M.	67	84	69	61
at 9 P.M.	79	89	85	79
Mean	77	87	78	74
Highest monthly mean humidity	90	91	89	82
Month of highest mean humidity	Jan. and Feb.	October.	February.	December.

at Ten Grammar School Stations, for the year 1870.

BELLEVILLE.	GODERICH.	STRATFORD.	HAMILTON.	SIMCOE.	WINDSOR.
29-9579 29-9356 29-9425 29-9453 30-610 7 a.m. Jan. 14 30-102 September. 29-8829 July. 29-184 7 a.m. Jan. 3 1-426 1-426 January. -891 January 14-15.	29-9242 29-9172 29-9190 29-9201 30-469 7 a.m. March 24. 30-0741 September. 29-8453 February. 28-755 9 p.m. Jan. 2, (Sunday). 1-714 1-660 January. -989 January 17-18.	29-8834 29-8689 29-8800 29-8774 30-388 7 a.m. March 24. 30-0479 September. 29-7706 February. 28-659 9 p.m. Jan. 2, (Sunday). 1-729 1-691 January. 1-019 January 1-2.	29-9314 29-9108 29-9257 29-9226 30-502 7 a.m. Jan. 14. 30-0825 September. 29-8633 February. 29-194 7 a.m. Jan. 3. 1-308 1-308 January. -898 January 17-18.	29-687 29-659 29-665 29-6706 30-255 7 a.m. Jan. 19. 29-8080 September. 29-5532 December. 28-601 6 p.m. Jan. 2, (Sunday). 1-654 1-654 January. -860 January 2-3.	29-9812 29-9576 29-9618 29-9669 30-538 7 a.m. March 24. 30-0859 September. 29-9057 February. 29-164 9 p.m. March 12. 1-374 1-374 March. -911 January 17-18.
42-13 51-23 45-05 46-14 55-09 36-25 18-84 43-7 January 10. 5-4 January 1. 94-4 June 25. -17-5 January 14. June. 71-46 February. 18-57 June 25. 79-86 January 14. -8-43	44-35 49-68 45-54 46-52 53-90 38-0 15-90 35-0 April 26. 4-3 January 3. 90-2 June 24. -3-4 January 14. July. 68-07 February. 21-75 July 23. 79-03 December 28. 10-17	41-27 49-81 43-77 44-95 52-85 36-15 16-70 39-5 March 19. 3-0 January 7. 88-7 June 27. 8-6 December 29. June. 67-60 February. 19-79 June 25. 79-00 February 21. 0-90	44-39 54-27 45-53 48-06 59-19 34-47 24-72 49-10 May 3. 5-30 May 6. 101-8 June 25. -9-9 December 29. July. 72-10 February. 23-14 June 27. 87-0 December 29. 3-0	44-63 54-22 46-32 48-39 56-95 37-94 19-01 37-3 April 27. 3-6 December 31. 95-0 June 26. -5-0 December 29. July. 70-26 February. 23-79 June 27. 80-49 February 21. 3-07	45-89 55-30 46-89 49-36 58-08 39-37 18-71 38-6 January. 3-2 December 16. 96-2 June 25. -7-0 February 21. July. 72-72 February. 24-84 June 25. 84-23 February 21. 1-57
-283 -323 -315 -307 -582 July. -098 February.	-302 -329 -308 -313 -588 July. -102 February.	-281 -319 -294 -298 -570 July. -099 February.	-297 -333 -307 -312 -590 July. -108 February.	-302 -351 -320 -324 -605 July. -120 February.	-316 -339 -320 -325 -614 July. -134 February.
83 73 84 80 90 March.	84 76 84 81 84 September.	87 73 84 81 88 January.	82 67 82 77 81 Feb., Oct., Dec.	85 76 85 82 92 January.	86 69 85 80 96 Feb. and March.

TABLE I.—

	PEMBROKE.	CORNWALL.	BARRIE.	PETERBOROUGH.
Lowest monthly mean humidity	65	84	68	61
Month of lowest mean humidity	May.	July.	May.	May.
AMOUNT OF CLOUDINESS.				
ANNUAL MEANS. {	at 7 A.M.	5.30	6.32	5.96
	at 1 P.M.	5.94	6.42	6.515
	at 9 P.M.	4.75	5.00	5.04
	Mean	5.33	5.91	5.84
Highest monthly mean cloudiness	8.1	7.7	7.9	7.53
Month of highest mean cloudiness	December.	December.	January.	January.
Lowest monthly mean cloudiness	4.3	3.4	3.7	4.179
Month of lowest mean cloudiness	August.	September.	June.	September.
RAIN AND SNOW.				
Number of rainy days	93.	57	103.	86
Duration in hours and minutes	436.9			664.19
Depth in inches	18.4598		22.5008	23.938
Number of snowy days	69.	48	72.	53.
Duration in hours and minutes	487.25			500.48
Depth in inches	94.75		148.375	112.9
Total depth of rain and melted snow..	27.9348		37.3383	35.228
Month of greatest precipitation	October.		March.	March.
Depth.	6.2091		5.4710	5.001
Month of least precipitation	May.		May.	May.
Depth.	9704		7864	902

VELOCITY OF WIND.—In the absence of proper anemometers, velocity is merely estimated from 1 to 10,

Continued.

BELLEVILLE.	GODERICH.	STRATFORD.	HAMILTON.	SIMCOE.	WINDSOR.
66 May.	75 April.	69 April.	72 May.	73 May.	61 September.
5.07	6.93	6.2	5.51	4.9	6.2
4.97	6.85	6.5	6.65	4.6	6.8
4.82	5.95	5.5	4.57	5.0	5.7
4.941	6.575	6.1	5.57	4.8	6.2
7.44	9.20	8.8	7.77	6.2	8.3
January.	December.	December.	December.	March, Dec.	January.
3.27	4.40	3.4	3.33	2.7	4.0
July.	August.	August.	August.	August.	August.
97.	120.	102	107	83	101
354.00	576.7	550.05	404.05	.....	342.
27.891	34.3198	34.1598	36.5095	36.4909	24.3963
44.	79	66	48	32	49
234.00	486.0	506.30	303.40	.....	224.
145.7	124.6	142.6	121.136	83.	85.15
42.461	46.7798	48.4198	48.6231	44.7909	32.9118
January.	July.	July.	January.	January.	January.
6.314	7.6146	8.2938	11.2940	8.7028	5.3191
May.	April.	April.	November.	November.	May.
1.039	1.1076	1.3750	1.4746	1.2741	.8964

as reported in *Journal of Education*.

TABLE K.—THE NORMAL SCHOOL FOR ONTARIO, 1870.

ABSTRACT No. 1.—GROSS ATTENDANCE OF STUDENTS, CERTIFICATES, &c.

THE SESSIONS OF THE NORMAL SCHOOL FOR ONTARIO.	APPLICANTS FOR ADMIS- SION.			REJECTED.			ADMITTED.			WHO HAD BEEN TEACHERS BEFORE.		
	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.
From the 1st to the 42nd Session, inclusive.....	6388	3324	3064	651	332	319	5737	2992	2745	2817	2001	846
Forty-third Session, 1870	170	68	102	11	3	8	159	65	94	73	44	29
Forty-fourth Session, 1870	178	74	104	5	2	3	173	72	101	72	43	29
Grand Total	6736	3466	3270	667	337	330	6069	3129	2940	2992	2088	904

ABSTRACT No. 1.—GROSS ATTENDANCE OF STUDENTS, CERTIFICATES, &c.—Continued.

THE SESSION OF THE NORMAL SCHOOL FOR ONTARIO.	WHO ATTENDED FORMERLY.			WHO LEFT.			WHO RECEIVED PROVIN- CIAL CERTIFICATES.		
	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.
From the 1st to the 42nd Session, inclusive	1966	821	1145	1101	658	443	307	225	82
Forty-third Session, 1870	38	9	29	34	18	16	9	8	1
Forty-fourth Session, 1870	79	25	54	42	24	18	1	1	1
Grand Total	2083	855	1228	1177	700	477	316	233	83

* Of this number 49 were admitted by fees, 429 received "Certificates of Standing in Class," from the Masters, before Provincial Certificates were issued, and 2,194 received weekly aid, amounting to \$44,369.50. But of the whole number of admissions, a very large proportion have attended two or three Sessions—some even four and five—so as greatly to reduce the aggregate of individual attendance. And the same is true of the Provincial Certificates, of which a considerable number have lapsed by death, and become otherwise unavailable by removals, and a still larger number have been superseded by subsequent certificates.

ABSTRACT No. 2.—COUNTIES WHENCE TEACHERS IN TRAINING AT THE NORMAL SCHOOL CAME.

THE SESSIONS OF THE NORMAL SCHOOL FOR ONTARIO.	Glengarry.		Stormont.		Dundas.		Prescott.		Russell.		Carleton.		Greenville.		Leeds.		Lanark.		Renfrew.		Frontenac.		Addington.		Lennox.		Prince Edward.		Hastings.		Northumber- land.	
	Total.	Female.	Total.	Male.	Total.	Male.	Total.	Female.	Total.	Male.	Total.	Female.	Total.	Male.	Total.	Male.	Total.	Female.	Total.	Male.	Total.	Male.	Total.	Male.	Total.	Male.	Total.	Male.	Total.	Male.	Total.	
From the 1st to the 42nd Session, inclusive	40	19	21	40	26	14	29	22	7	25	13	12	17	11	6	76	65	11	45	34	11	67	65	11	45	34	11	67	65	11	45	34
Forty third Session, 1870 .....	...	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Forty-fourth Session, 1870 .....	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Grand Total	40	19	21	42	27	15	30	22	8	25	13	12	17	11	6	77	66	12	48	35	13	76	66	12	48	35	13	77	66	12	48	35

ABSTRACT No. 2.—COUNTIES WHENCE TEACHERS IN TRAINING AT THE NORMAL SCHOOL CAME.—Continued.

THE SESSIONS OF THE NORMAL SCHOOL FOR ONTARIO.	Durham.		Peterboro'.		Victoria.		Ontario.		York.		Peel.		Simcoe.		Halton.		Wentworth.		Brant.		Lincoln.		Welland.													
	Total.	Male.	Total.	Male.	Total.	Male.	Total.	Male.	Total.	Male.	Total.	Male.	Total.	Male.	Total.	Male.	Total.	Male.	Total.	Male.	Total.	Male.	Total.	Male.	Female.											
From the 1st to the 42nd Session, Exclusive	237	158	79	44	31	13	41	33	8	249	158	91	1755	579	1176	184	136	48	115	83	32	142	62	80	347	82	265	130	64	75	120	62	58	145	71	74
Forty-third Session, 1870	7	4	3	1	1	2	5	37	9	28	3	1	2	1	1	4	8	3	1	1	1	2	3	2	2	10	3	3	3	2	2	3	2	3	3	
Forty-fourth Session, 1870	6	2	4	4	2	2	3	1	2	5	32	1	1	1	1	5	1	1	1	1	1	2	1	1	10	8	10	1	1	1	3	2	1	1	1	
Grand Total	250	164	86	49	34	15	48	36	12	593	1236	189	138	51	117	84	33	149	64	85	365	82	283	143	68	75	125	62	63	150	72	78				

ABSTRACT No. 2.--COUNTIES WHENCE TEACHERS IN TRAINING AT THE NORMAL SCHOOL, CAME.—*Concluded.*

THE SESSIONS OF THE NORMAL SCHOOL FOR ONTARIO.	Haldimand.		Norfolk.		Oxford.		Waterloo.		Wellington.		Grey.		Perth.		Huron,		Bruce.		Middlesex.		Elgin.		Kent.		Lambton.		Essex.		Grand Total.																
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.																	
From the 1st to the 42nd Session inclusive.....	81	43	38	88	50	38	197	112	85	68	54	14	120	76	44	45	27	18	96	69	27	79	68	11	40	33	7	290	147	143	107	79	28	62	83	29	60	35	25	22	12	10	5737		
Forty-third Session, 1870.....	1	1	...	3	...	3	5	3	2	7	1	6	1	1	5	2	3	4	2	8	7	1	3	2	1	10	7	3	4	...	4	3	1	1	...	1	139
Forty-fourth Session, 1870.....	3	...	3	6	3	13	6	7	1	...	1	...	1	4	2	2	5	3	2	8	6	2	4	...	8	5	3	5	3	2	2	...	4	2	1	173	
Grand Total.....	82	44	38	91	50	41	208	118	90	88	61	27	122	77	45	54	31	23	105	74	31	95	81	14	47	39	8	308	159	149	116	82	34	68	38	30	65	37	28	23	13	10	6069		

* See Note to Abstract No. 1, page 120.

ABSTRACT No. 3.—RELIGIOUS PERSUASION OF THE STUDENTS ATTENDING THE NORMAL SCHOOL.

THE SESSIONS OF THE NORMAL SCHOOL FOR ONTARIO.	Total Num-ber of Stu-dents ad-mitted.		Church of England.		Roman Catholic.		Presby-terians.		Methodists.		Baptists.		Congrega-tionalists.		Lutherans.		Quakers.		Universal-ists.		Unitarians.		Disciples.		Other per-sunations.												
	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.										
From the 1st to the 42nd Session inclusive	5737	2991	2746	989	453	536	246	106	140	1604	861	743	2016	1077	939	437	247	190	232	86	146	6	5	1	41	32	9	4	4	5	30	13	17	123	103	20	
Forty-third Session, 1870	159	65	94	26	13	13	6	55	20	35	57	30	27	5	6	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Forty-fourth Session, 1870.	173	72	101	33	10	23	11	2	9	51	20	31	64	35	29	3	1	2	4	1	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Grand Total	6069	3128	2941	1048	476	572	263	114	149	1710	901	809	2137	1142	995	445	248	197	242	87	155	7	5	2	41	32	9	4	4	5	30	13	17	133	108	25	

* See Note to Abstract No. 1.

TABLE L.—The other Educational Institutions of Ontario.

	COLLEGES.				ACADEMIES AND PRIVATE SCHOOLS.				TOTAL.			
	Number of Colleges.	Number of Students.	Annual Income or Legislative Aid.	Amount received from Fees.	Number of Academies and Private Schools.	Number of Pupils.	Number of months open.	Number of Teachers.	Amount received from Fees.	Total Number of Col- leges, Academies and Private Schools.	Total Students and Pupils.	Total amount received from Fees or Legisla- tive Aid.
			\$ cts.	\$ cts.					\$ cts.			\$ cts.
Total Counties.....					85	1781	9	89	8015 00	85	1781	8015 00
“ Cities	11	1320	115000 00	42000 00	68	2263	11	119	54000 00	79	3583	211000 00
“ Towns	5	610	44000 00	11000 00	92	1900	11	126	21118 00	97	2510	76118 00
“ Villages					39	618	11	39	2719 00	39	618	2719 00
Grand Total, 1870	16	1930	159000 00	53000 00	284	6562	11	373	85852 00	300	8492	297852 00
“ 1869	16	1930	159000 00	53000 00	279	6392	10	352	81315 00	295	8322	293315 00
Increase.....					5	170	1	21	4537 00	5	170	4537 00
Decrease												

TABLE M.—STATEMENT No. 1.—The Free Public Libraries of Ontario.

THE FREE PUBLIC LIBRARIES SUPPLIED BY THE EDUCATION DEPARTMENT
DURING THE YEAR 1870.

COUNTIES AND NAMES OF COMMON SCHOOL LIBRARIES.		MONEYS.			Total number of Volumes supplied in 1870.
		Amount of Local Ap- propriation for 1870.	Amount of Legislative Apportion- ment for 1870.	Value of Books sent in 1870.	
<i>Grenville :</i>		\$ cts.	\$ cts.	\$ cts.	
	Wolford, No. 15.....	6 00	6 00	12 00	31
<i>Leeds :</i>					
	Leeds and Lansdowne Front, No. 11.....	42 00	42 00	84 00	114
<i>Lanark :</i>					
	Dalhousie and Lavant, No. 1, U. S. S.....	10 00	10 00	20 00	29
	Lavant, „ 2	8 00	8 00	16 00	26
<i>Renfrew :</i>					
	M'Nab, No. 2.....	18 00	18 00	36 00	67
<i>Frontenac :</i>					
	Loughborough, „ 6.....	50 00	50 00	100 00	126
<i>Addington :</i>					
	Ernestown, „ 2.....	17 50	17 50	35 00	90
<i>Prince Edward :</i>					
	Teachers' Reference Library. County Muni- cipal Council	20 00	20 00	40 00	53
	Ameliasburgh, No. 2.....	25 00	25 00	50 00	80
	Do „ 11.....	25 00	25 00	50 00	91
<i>Durham :</i>					
	Cartwright, „ 2.....	10 00	10 00	20 00	59
	Cavan, „ 13.....	25 00	25 00	50 00	67
	Clarke, „ 5.....	12 00	12 00	24 00	38
	Darlington, „ 9.....	37 75	37 75	75 50	98
	Do „ 10.....	10 00	10 00	20 00	36
<i>Peterborough :</i>					
	Dummer, „ 3.....	15 00	15 00	30 00	46
<i>Ontario :</i>					
	Pickering, „ 10.....	50 00	50 00	100 00	135
	Port Perry, Union School,	25 00	25 00	50 00	89
	Uxbridge, do	21 00	21 00	42 00	70
	Do No. 5	15 00	15 00	30 00	44
<i>York :</i>					
	Gwillimbury, North, No. 1.....	10 00	10 00	20 00	42
	Markham, No. 8.....	55 64½	55 64½	111 29	96
	York, „ 5.....	27 71½	27 71½	55 43	75
	Do „ 13.....	5 00	5 00	10 00	45
<i>Peel :</i>					
	Caledon, „ 11.....	20 00	20 00	40 00	36
	Chinguacousy, „ 22.....	8 78	8 78	17 56	23
<i>Simcoe :</i>					
	Adjala, „ 3.....	32 18	32 18	64 36	79
	Morrison, „ 1.....	5 00	5 00	10 00	28
	Mulmur and Nottawasaga, No. 11, U. S. S....	50 00	50 00	100 00	151
	Oro, No. 11.....	60 00	60 00	120 00	162
	Penetanguishene Reformatory Prison.....	50 00	50 00	100 00	232
	Tossorontio, No. 1.....	20 00	20 00	40 00	80
	Do „ 3.....	5 00	5 00	10 00	9
<i>Halton :</i>					
	Esquesing „ 5.....	6 75	6 75	13 50	14
	Do „ 12.....	55 00	55 00	110 00	116
<i>Wentworth :</i>					
	Barton, „ 7.....	5 00	5 00	10 00	15
	Beverley „ 7.....	20 00	20 00	40 00	107
<i>Norfolk :</i>					
	Middleton „ 2.....	40 05	40 05	80 10	119
	Townsend „ 23.....	20 00	20 00	40 00	77
<i>Waterloo :</i>					
	Waterloo, 7	16 00	16 00	32 00	89
<i>Wellington :</i>					
	Guelph, „ 4.....	15 00	15 00	30 00	22

TABLE M.—STATEMENT No. 1.—The Free Public Libraries of Ontario.—
Continued.

THE FREE PUBLIC LIBRARIES SUPPLIED BY THE EDUCATION DEPARTMENT
DURING THE YEAR 1870.

COUNTIES AND NAMES OF COMMON SCHOOL LIBRARIES.				MONETYS.			Total Number of Volumes supplied in 1870.
				Amount of Local Ap- propriation for 1870.	Amount of Legislative Apportion- ment for 1870.	Value of Books sent in 1870.	
<i>Grey :</i>				\$ cts.	\$ cts.	\$ cts.	
	Collingwood,	No. 8.....		10 00	10 00	20 00	37
	Do	„ 9.....		7 00	7 00	14 00	22
	Do	„ 13.....		10 00	10 00	20 00	37
	Egremont,	„ 9.....		10 00	10 00	20 00	31
	Melancthon,	„ 4.....		10 00	10 00	20 00	31
<i>Perth :</i>							
	Blanchard,	„ 4.....		25 00	25 00	50 00	84
	Logan and Grey,	„ 7, U. S. S.		10 00	10 00	20 00	36
<i>Huron :</i>							
	Colborne, Tp.,	M. C.		150 00	150 00	300 00	373
	M'Killop,	No. 2.....		10 00	10 00	20 00	20
	Stanley,	„ 8.....		19 00	19 00	38 00	42
<i>Bruce :</i>							
	Arran,	„ 4.....		27 00	27 00	54 00	103
	Huron,	„ 1.....		10 00	10 00	20 00	29
	Do	„ 9.....		5 00	5 00	10 00	21
<i>Middlesex :</i>							
	M'Gillivray,	„ 6.....		5 00	5 00	10 00	21
	Do	„ 15.....		10 00	10 00	20 00	32
<i>Elgin :</i>							
	Southwold,	„ 9.....		5 00	5 00	10 00	27
	Yarmouth and Dorchester S.,	Nos. 22 and 4, U. S. S.		25 00	25 00	50 00	72
<i>Lambton :</i>							
	Sarnia,	No. 5.....		49 80	49 80	99 60	110
<i>Essex :</i>							
	Gosfield and Mersea,	No. 6, U. S. S.		20 00	20 00	40 00	83
<i>Towns :</i>							
	Belleville,	B. S. T.....		34 00	34 00	68 00	113
	Dundas,	U. S.		11 20	11 20	22 40	7
	Goderich,	B. S. T.....		20 00	20 00	40 00	51
	Lindsay,	R. C. S. S.		100 00	100 00	200 00	202
	Perth,	B. S. T.....		59 46½	59 46½	118 93	142
	Sarnia,	Jail		25 00	25 00	50 00	87
<i>Villages :</i>							
	Caledonia-Seneca,	U. S.		10 67	10 67	21 34	7
	Newcastle,	U. S.		20 35	20 35	40 70	63
	New Hanburgh,	B. S. T.....		30 00	30 30	60 00	118
Total.....				1697 85½	1697 85½	3395 71	5024

TABLE M.—STATEMENT No. 2.—The Free Public Libraries of Ontario.—Continued.

COUNTIES.	THE FREE PUBLIC LIBRARIES SUPPLIED BY THE EDUCATION DEPARTMENT.						OTHER PUBLIC LIBRARIES.				TOTAL.							
	MONEYS.						OTHER PUBLIC LIBRARIES.											
	Amount of Local Appropriation for 1870.	Amount of Legislative appropriation for 1870.	Value of books sent in 1870.		Value of books sent in former years.	Total value of books sent.	No. of Libraries, exclusive of sub-divisions.	Total number of volumes in Libraries.	Sunday School Libraries.			Other Public Libraries.						
			\$ cts.	\$ cts.					Libraries.	Volumes.		Libraries.	Volumes.					
Glengarry	6 00	6 00	12 00	876 00	1973 02	1973 02	15	4009	27	3924	1	579	36	6343	93	9703	127	22416
Stormont	42 00	42 00	84 00	1439 10	5147 80	5183 80	41	9916	56	7000	30	5500	3	405	93	9703	127	22416
Dundas	18 00	18 00	36 00	1563 72	1599 72	1599 72	19	3017	29	2136	3	850	3	950	45	6003	51	6003
Prescott	50 00	50 00	100 00	794 77	894 77	894 77	10	1578	32	3683	3	350	3	350	45	6211	45	6211
Russell	17 50	17 50	35 00	630 00	665 00	665 00	3	1045	27	4153	2	630	2	630	32	5828	32	5828
Carleton	70 00	70 00	140 00	720 00	720 00	720 00	2	1556	14	1282	4	350	4	350	20	3188	20	3188
Grenville	94 75	94 75	189 50	1349 60	1489 60	1489 60	16	2684	42	4361	3	900	3	900	61	7345	61	7345
Leeds	15 00	15 00	30 00	2851 54	2851 54	2851 54	22	5107	71	6861	3	957	3	957	96	13325	96	13325
Lanark	94 75	94 75	189 50	4362 26	4362 26	4362 26	34	8721	78	9471	6	2580	6	2580	118	20772	118	20772
Renfrew	15 00	15 00	30 00	1456 57	1646 07	1646 07	25	3550	57	7393	3	450	3	450	85	11393	85	11393
Frontenac	15 00	15 00	30 00	3343 56	3373 56	3373 56	26	7018	34	3150	6	1319	6	1319	66	11487	66	11487
Adlington	70 00	70 00	140 00	620 24	620 24	620 24	46	3539	38	2431	3	360	3	360	87	6330	87	6330
Lennox	111 00	111 00	222 00	5691 12	5691 12	5691 12	31	9218	46	8286	6	2900	6	2900	83	20404	83	20404
Prince Edward	98 36	98 36	196 72	8913 92	9110 64	9110 64	76	15742	115	15272	23	5645	23	5645	214	36659	214	36659
Hastings	28 78	28 78	57 56	4613 66	4671 22	4671 22	54	8208	51	8371	3	680	3	680	108	17259	108	17259
Northumberland	222 18	222 18	444 36	4087 85	4532 21	4532 21	47	8124	56	5911	7	2156	7	2156	110	16191	110	16191
Durham	61 75	61 75	123 50	1726 44	1849 94	1849 94	16	2690	33	7630	11	3126	11	3126	60	13446	60	13446
Peterborough	25 00	25 00	50 00	2044 80	2094 80	2094 80	18	4290	53	8500	9	2366	9	2366	80	15156	80	15156
Victoria	111 60	111 60	222 00	5691 12	5691 12	5691 12	31	9218	46	8286	6	2900	6	2900	83	20404	83	20404
Ontario	98 36	98 36	196 72	8913 92	9110 64	9110 64	76	15742	115	15272	23	5645	23	5645	214	36659	214	36659
York	28 78	28 78	57 56	4613 66	4671 22	4671 22	54	8208	51	8371	3	680	3	680	108	17259	108	17259
Peel	222 18	222 18	444 36	4087 85	4532 21	4532 21	47	8124	56	5911	7	2156	7	2156	110	16191	110	16191
Simcoe	61 75	61 75	123 50	1726 44	1849 94	1849 94	16	2690	33	7630	11	3126	11	3126	60	13446	60	13446
Halton	25 00	25 00	50 00	2044 80	2094 80	2094 80	18	4290	53	8500	9	2366	9	2366	80	15156	80	15156
Wentworth	111 60	111 60	222 00	5691 12	5691 12	5691 12	31	9218	46	8286	6	2900	6	2900	83	20404	83	20404
Brant	98 36	98 36	196 72	8913 92	9110 64	9110 64	76	15742	115	15272	23	5645	23	5645	214	36659	214	36659
Lincoln	28 78	28 78	57 56	4613 66	4671 22	4671 22	54	8208	51	8371	3	680	3	680	108	17259	108	17259
Welland	222 18	222 18	444 36	4087 85	4532 21	4532 21	47	8124	56	5911	7	2156	7	2156	110	16191	110	16191
Haldimand	61 75	61 75	123 50	1726 44	1849 94	1849 94	16	2690	33	7630	11	3126	11	3126	60	13446	60	13446
Norfolk	60 05	60 05	120 10	1420 86	1420 86	1420 86	21	2678	67	7187	5	1200	5	1200	93	11065	93	11065

Oxford	16 00	16 00	32 00	5335 04	45	10182	88	11413	5	990	141	22585
Waterloo	15 00	15 00	30 00	2020 87	15	3779	21	3962	12	1660	48	8501
Wellington	47 00	47 00	94 00	4692 67	52	8109	57	7866	10	2607	119	18582
Grey	35 00	35 00	70 00	3316 72	38	2410 72	38	6436	16	1963	124	16586
Perth	179 00	179 00	358 00	3239 02	35	6092	40	5928	15	1788	90	13808
Huron	42 00	42 00	84 00	6090 50	56	10169	125	7621	15	2039	196	19849
Bruce	15 00	15 00	30 00	1801 60	29	3284	48	3910	6	480	83	7674
Middlesex	30 00	30 00	60 00	4425 36	54	7576	66	8553	12	4692	132	20851
Elgin	49 80	49 80	99 60	1998 14	19	3782	57	5503	8	1205	84	10490
Kent	20 00	20 00	40 00	3760 00	33	7258	54	5566	8	1626	95	14450
Lambton	49 80	49 80	99 60	3358 53	24	4721	50	3988	8	1390	82	10099
Essex	20 00	20 00	40 00	1648 00	9	2959	19	3350	10	1444	38	7733
Districts	1387 17	1387 17	2774 34	104 00	1	128	3	400	282	67993	3363	507510
Totals	1387 17	1387 17	2774 34	108260 03	1068	203233	2013	236284	282	67993	3363	507510
Total Counties	1387 17	1387 17	2774 34	108260 03	1068	203233	2013	236284	282	67993	3363	507510
" Cities	249 66½	249 66½	499 33	11819 01	10	17971	75	26310	18	54450	103	98731
" Towns	61 02	61 02	122 04	8688 94	42	11890	201	53208	50	34681	293	99869
" Villages	1697 85½	1697 85½	3395 71	3361 98	26	5968	144	29963	39	17317	209	53248
Grand Total for 1870	2327 97½	2327 97½	4655 95	132129 96	1146	239062	2433	345855	389	174441	3968	750358
" 1869	630 12	630 12	1260 24	127474 01	1107	234038	2273	334985	385	174037	3765	743060
Increase	630 12	630 12	1260 24	4655 95	39	5024	160	10870	4	404	203	16298
Decrease												

TABLE M.—STATEMENT No. 3.—The Free Public Libraries of Ontario.—*Concluded.*

The following is a Statement of the number and classification of Public Library and Prize Books sent out from the Depository of the Ontario Educational Department, from 1853 to 1870, inclusive.

Number of Volumes sent out during the years	Total Library Volumes of	History.	Zoology and Physi- ology.	Botany.	Phenomena.	Physical Science.	Geology.	Natural Philosophy and Manufactures.	Chemistry.	Agricultural Chem- istry.	Practical Agriculture	Literature.	Voyages.	Biography.	Tales and Sketches— Practical Life.	Fiction.	Teacher's Library.	Prize Books.	Grand Total Library and Prize Books.
1853	21922	4158	1602	287	906	526	234	940	132	192	807	2694	1141	2917	5178	.....	208	.....	21922
1854	66711	10633	5332	1030	2172	1351	636	4780	629	321	3253	5704	4350	6363	19307	.....	578	.....	66711
1855	28659	5475	2653	318	558	663	260	1808	297	76	1432	3361	2925	3681	6049	.....	432	.....	28659
1856	13669	2498	632	118	397	287	77	660	55	31	418	1523	1019	1844	3832	.....	258	.....	13669
1857	29823	5295	1793	321	632	817	195	1729	134	67	1247	2391	2253	3516	9219	.....	244	.....	29823
1858	7387	1567	903	86	152	98	61	276	27	2	186	713	843	744	2245	.....	84	.....	7387
1859	9408	1670	551	136	209	192	130	432	87	18	500	1169	714	1127	2401	.....	172	.....	9408
1860	9072	1561	475	144	223	200	100	526	61	17	339	852	797	1115	2529	.....	142	.....	9072
1861	6488	1273	362	59	101	72	64	223	36	2	172	601	760	880	1826	.....	117	.....	6488
1862	5599	927	244	45	99	43	75	211	45	24	165	412	661	830	1766	.....	112	.....	5599
1863	6274	707	304	42	97	80	67	282	26	6	262	547	632	864	2286	.....	112	.....	6274
1864	3561	532	140	11	47	38	28	134	7	.....	87	321	230	451	1198	.....	57	.....	3561
1865	3882	611	168	108	62	53	26	131	3	.....	110	328	534	553	1225	.....	58	.....	3882
1866	6856	1144	217	55	125	81	55	282	26	19	291	652	776	784	2240	.....	148	.....	6856
1867	5425	1003	125	20	78	65	15	189	7	.....	118	524	565	650	1971	.....	66	.....	5425
1868	6573	1106	214	39	86	51	42	195	26	.....	132	534	979	736	2241	.....	52	.....	6573
1869	6428	1146	268	51	96	91	35	198	18	19	162	409	1172	882	1237	.....	60	.....	6428
1870	5624	865	162	28	68	64	36	156	14	.....	139	367	527	610	1542	.....	52	.....	5624
Totals	242672	42193	15275	2811	6108	4772	2077	13152	1540	794	9592	23272	20989	27977	68153	1015	2952	503449	746121
Deduct Volumes returned for Exchange, &c.																			616
Volumes sent to Mechanics' Institutes and Sunday Schools, not included in the above																			745505
Grand Total, Library and Prize Books, despatched up to the 31st December, 1870																			14379
																			759884

TABLE N.—The Grammar and Common Schools of Ontario.

COUNTIES.	MONEYS.			MAPS OF :										APPARATUS.		Object Lessons in	Price Books.	
	Local Contributions.	Legislative Apportionment.	Total.	World.	Europe.	Asia.	Africa.	America.	B. N. America and Canada.	Great Britain and Ireland.	Single Hemisphere.	Classical and Scriptural.	Other Charts and Maps.	Globes.	Sets of Apparatus.			Other School Apparatus.	Historical and other Lessons in sheets.	No. of Volumes.
Glengarry.....	\$ 83 15	\$ cts. 15	\$ 166 30	1	1	4	3	3	1				4	1	1	1	1	654
Stormont.....	68 50	68 50	137 00	3	3				4	3	2	1		1	1	1	16	170
Punua.....	46 97	46 97	93 94	3	3	3	5	4	5	3	2	1	2	1		1	5	184
Prescott.....	66 30	66 30	132 60	3	5	5			2	3							74	133
Russell.....	5 00	5 00	10 00															42
Carleton.....	140 48	140 48	280 96	4	3	2		3	3	1		1			1		167	634
Grenville.....	134 00	134 00	268 00	1	1	1			5	1		1						639
Lewis.....	137 20	137 20	274 40	3	3	1	3	3	5	1	4	1	2	1			3	1108
Lanark.....	311 75	311 75	623 50	2	5	5	5	5	5	8	6	4	3	1	1		3	802
Kent.....	59 70	59 70	119 40	1	1	1	1	1	1		2			1				297
Frontenac.....	102 80	102 80	205 60	2	2	2	2	2	2	3	2	1	1	1	1		39	532
Addington.....	68 45	68 45	136 90	1	2	1	1	2	2								16	304
Lennox.....	9 00	9 00	18 00															60
Prince Edward.....	225 58	225 58	451 16	11	12	9	9	11	12	2			2	6	2	1	173	231
Hastings.....	182 62½	182 62½	365 25	7	7	7	7	6	5	6	3	4	11	5	2	1	343	425
Northumberland.....	216 86	216 86	433 72	2	5	5	2	2	5			5	2					
Durham.....	280 55	280 55	561 10	3	6	5	2	5	8	4		1	7				178	881
Peterborough.....	110 91½	110 91½	221 83	7	6	8	2	4	6		2	1	8	4	1	8	104	236
Victoria.....	403 98	403 98	807 96	7	7	8	6	7	8	7	6	5	22	4	1	10	124	1045
Ontario.....	492 26½	492 26½	984 53	3	9	2	2	2	4	3	2	6	4	2	2	14	228	2392
York.....	508 00	508 00	1016 00	4	4	4	4	4	4	2	2		10	3		173	1455	
Peel.....	276 42	276 42	552 84	4	4	4	4	3	2	3	2		8	2	2	1	109	1455
Simcoe.....	508 88	508 88	1017 76	4	4	4	4	3	2	3	2		13	2		149	2778	
Haldon.....	239 83	239 83	479 66	2	12	9	6	8	9	12	8	3	6	2		6	81	1145
Wentworth.....	258 12	258 12	516 24	3	3	1	2	2	4	3	3	4	4	2	2	11		786
Brant.....	208 51	208 51	417 82	3	3	2	1	3	3	3	2	3	10	2	2			675
Lincoln.....	178 63	178 63	357 26	1	1	1	1	1	1	1	2	3	1	3	1	3		286
Welland.....	80 25	80 25	160 50		1	1	1	1	1	1	2	3	1	3	1	3	7	

TABLE N.—The Grammar and Common Schools of Ontario.—*Continued.*

SUMMARY OF MAPS, APPARATUS, AND PRIZE BOOKS SUPPLIED TO COUNTIES, CITIES, TOWNS, AND VILLAGES DURING THE YEAR.																		
COUNTIES.	MONEY'S.			MAPS OF:										APPARATUS.		Object Lessons.	Prize Books.	
	Local Contributions.	Legislative Apportionment.	Total.	World.	Europe.	Asia.	Africa.	America.	B. N. America and Canada.	Great Britain and Ireland.	Single Hemisphere.	Classical and Scriptural.	Other Charts and Maps.	Globes.	Sets of Apparatus.			Other School Apparatus (pieces).
Haldimand	\$ cts. 230 77½	\$ cts. 230 77½	\$ cts. 461 55	4	5	4	4	4	7	1	2	2	10	4	1	4	54	1015
Norfolk	278 52	278 52	557 04	2	5	5	5	5	5	6	2	4	3	2	2	6	61	1473
Oxford	496 69½	496 69½	993 39	2	5	5	6	5	6	6	8	7	9	4	2	6	179	2475
Waterloo	209 78	209 78	419 56	2	4	2	3	4	2	2	2	1	5	1	1	4	153	1198
Wellington	400 15	400 15	800 30	4	6	11	1	3	8	3	10	1	6	3	2	8	88	2437
Grey	473 30	473 30	946 60	6	11	11	10	9	13	10	10	3	14	5	2	8	377	2278
Perth	244 12½	244 12½	488 25	1	4	3	2	2	4	3	4	1	6	5	2	3	156	1404
Huron	728 20½	728 20½	1456 41	3	7	5	6	7	7	8	8	3	5	2	1	6	437	3813
Bruce	342 66	342 66	685 32	1	2	2	2	1	2	1	1	6	2	1	1	6	2351	
Middlesex	618 75	618 75	1237 50	2	10	8	7	8	10	13	10	6	12	5	3	5	201	3387
Elgin	306 58½	306 58½	613 17	4	10	10	9	10	7	12	6	2	12	5	3	2	183	1287
Kent	147 40	147 40	294 80	1	1	1	1	1	1	1	2	1	2	1	1	1	56	902
Lambton	337 91	337 91	675 82	2	5	6	7	6	18	12	12	3	8	5	2	4	121	1246
Essex	176 39	176 39	352 78	3	6	4	3	6	6	6	2	4	4	2	2	4	56	500
District of Algoma	15 96½	15 96½	31 93	1	1	.....	.....	1	1	1	.....	.....	1	.....	.....	1	.....	26
Cities	1282 56½	1282 56½	2565 13	4	8	8	7	8	12	8	16	4	12	4	14	295	1018	3648
Towns	1475 55½	1475 55½	2951 11	16	16	11	11	8	12	8	6	13	30	10	7	180	491	4674
Villages	880 58½	880 58½	1761 17	7	7	8	7	7	10	11	11	16	17	5	10	13	173	2943
Total, 1870	14405 12	14405 12	28810 24	136	221	188	164	180	238	185	153	135	269	109	62	612	5880	60655
Total, 1869	12232 54½	12232 54½	24465 09	125	208	156	134	163	194	143	143	109	217	78	39	738	5240	54657
Increase.....	2172 57½	2172 57½	4345 15	11	13	29	30	17	44	45	10	26	52	31	23	116	640	5998
Decrease.....																		

TABLE O.—The Superannuated or Worn-out Common School Teachers.

NAME.	Age in 1870.	Years of Teaching in Ontario.	Amount of Pension for 1870.*	Amount of cash certified to the Hon. Provincial Treasurer as payable to pensioners from 1st January to 30th December.	Period for which the payments were made.	
			£	cts.	£	cts.
6 Donald Currie	82	18	42	00	38	00
11 Thomas J. Graffe	63	18	42	00	38	00
13 James Benton	74	25	58	33	54	33
15 James Breakenridge.....	66	32	74	67	70	67
19 Peter Stewart	87	22	51	33	47	33
21 John Price	78	24	56	00	52	00
36 Donald McDonald	84	13	30	34	26	34
42 W. R. Thornhill	72	22	51	33	47	33
45 John Fletcher	61	18	42	00	38	00
47 John Nowlan.....	79	24	56	00	52	00
49 George Reynolds	75	28½	66	50	62	50
54 Alexander Miller	84	28½	66	50	62	50
55 John Donald	71	20½	47	84	43	84
56 Angus McDonell	75	33½	77	17	73	17
57 James Forde	68	18	42	00	38	00
60 Gideon Gibson	85	19	44	33	40	33
63 Donald McDougall	70	14	32	67	28	67
71 Thomas White	80	23¾	55	43	51	43
72 Rev. Joshua Webster	76	22	51	33	47	33
73 Norman McLeod	78	16	37	34	33	34
78 William Foster	70	22	51	33	47	33
79 William Glasford	60	18½	43	17	39	17
82 John Vert	60	21½	50	17	46	17
83 William Benson.....	73	23	53	67	49	67
84 William Kearns.....	78	25	58	33	54	33
86 James Leys	78	17	39	67	35	67
87 John Healy.....	81	26	60	67	56	67
88 Hector McRae	74	20	46	67	42	67
92 Emily Cozens.....	65	27	63	00	59	00
93 William Dermott	72	13	30	33	26	33
96 Walter Hick	82	25	58	33	54	33
97 John Higgintotham.....	79	22	51	33	+	
101 William Leonard	85	13	30	34	26	34
107 Daniel Wing	67	26	60	67	56	67
110 Martin Devereux	73	23	53	67	49	67
111 Michael O'Kane	78	20½	47	84	43	84
114 Alexander Jenkins	76	18	42	00	38	00
115 Isabella Kennedy.....	68	22	51	33	47	33
117 William Miller	84	10	23	33	19	33
118 Robert Beattie	75	20½	47	84	43	84
119 John L. Biggar	78	25	58	33	54	33
120 William Corry	80	17	39	67	35	67
121 Marianne Ederington	59	20	46	67	42	67
122 Peter Fitzpatrick	78	23	53	67	49	67
126 James Kehoe.....	70	19	44	33	40	33
128 James McQueen	63	22½	52	50	48	50
129 John Miskelly	72	12½	29	16	25	16
132 Nicholas Fagan	76	13	30	34	26	34
135 Andrew Power	52	17	39	67	35	67
137 Catharine Snider	61	18	42	00	38	00
139 John Tucker	77	21	49	00	45	00
140 John Brown	72	26	60	67	56	67
141 John Monaghan	66	15	35	00	31	00
142 Richard Youmans.....	66	20	46	67	42	67
144 William Ferguson.....	70	24	56	00	52	00

Period for which the payments
were made.

For the year 1870.

* The pensioners are subject to a deduction, before payment, of \$4 for annual subscription required by law
+ Not heard from since 1869.

TABLE O.—The Superannuated or Worn-out Common School Teachers.—*Cont'd.*

NAME.	Age in 1870.	Years of Teaching in Ontario.	Amount of Pension for 1870.	Amount of cash certified to the Hon. Provincial Treasurer as payable to pensioners from 1st January to 30th December.	Period for which the payments were made.
145 Thomas Flanagan.....	73	20	\$ 46 67	\$ 42 67	For the year 1870.
148 Edward Ryan.....	79	25	58 33	54 33	
149 Daniel Sheehan.....	86	20	46 67	42 67	
155 Alexander Middleton.....	71	20	46 67	42 67	
159 Archibald McCormick.....	73	16	37 33	33 33	
161 Thomas Baldwin.....	72	13	30 34	25 34	
162 James Bodfish.....	67	20	46 67	42 67	
163 Anne Jackson.....	79	21	49 00	45 00	
165 E. Redmond.....	70	32½	75 84	71 84	
166 William Hildyard.....	64	19	44 33	40 33	
168 John McKenna.....	61	18½	43 16	39 16	
169 Mary Richards.....	75	33	77 00	73 00	
170 W. B. P. Williams.....	66	9	15 00	11 00	
171 Julius Ansley.....	66	18	42 00	38 00	
172 Thomas Baker.....	75	19	44 33	40 33	
173 Thomas Buchanan.....	65	20	46 67	42 67	
174 Matthew M. Hutchins.....	63	22	51 33	47 33	
178 Helen McLaren.....	61	21	49 00	45 00	
179 Ralph McCallum.....	61	23	53 67	49 67	
183 William Clarke.....	74	12	28 00	24 00	
184 John Dods.....	65	21	49 00	45 00	
186 P. G. Mulhern.....	70	29	67 67	63 67	
188 Thomas Sanders.....	78	30	70 00	66 00	
190 George Weston.....	72	22½	52 59	48 50	
193 Robert Hamilton.....	77	16	37 34	33 34	
194 John McDonnell.....	70	14	32 67	28 67	
195 John McGarvey.....	81	20	46 67	42 67	
196 Joseph D. Thomson.....	61	14	32 67	28 67	
198 Henry Bartely.....	63	23	53 67	49 67	
199 John Cameron.....	66	15	35 00	31 00	
200 Melinda Clarke.....	60	15½	39 16	32 16	
201 James Brown.....	65	27½	64 16	60 16	
202 Daniel Callaghan.....	73	30	70 00	*	
204 John McNamara.....	81	13	30 34	26 34	
206 James Robinson.....	55	18	42 00	38 00	
207 Jane Tyndall.....	66	21	49 00	45 00	
208 William Bell.....	69	11	25 67	21 67	
209 William Brown.....	52	13	30 34	26 34	
210 James Armstrong.....	57	25	58 33	54 33	
211 Caroline F. Mozier.....	61	27	63 00	59 00	
212 Eliza Barber.....	52	18½	43 17	39 17	
214 James McFarlane.....	64	27	63 00	59 00	
216 J. C. VanEvery.....	67	20	46 66	42 66	
217 Benjamin Woods.....	70	29	67 67	63 67	
218 John Younghusband.....	75	33½	78 17	74 17	
219 Wm. Irvine.....	72	36	84 12	*	
220 Angus McGillis.....	58	23	53 67	49 67	
221 Richard Campbell.....	70	31	72 33	68 33	
222 James Mahon.....	60	20	46 66	42 66	
224 Duncan Calder.....	72	25	58 33	54 33	
228 John Douglass.....	75	22	51 33	47 33	
229 Daniel McGill.....	65	28	65 33	61 33	
230 John Lenaten.....	75	12	40 00	36 00	
231 Anna McKay.....	67	18	42 00	38 00	
232 Sidney Russell.....	67	15	35 00	31 00	
233 Patrick Shirreff.....	70	26	60 67	56 67	
234 Robert Jordan.....	75	28	65 33	61 33	
235 David Kee.....	55	17	39 67	35 67	

* Paid in 1871.

TABLE O.—The Superannuated or Worn-out Common School Teachers.—*Cont'd.*

NAME.		Age in 1870.	Years of Teaching in Ontario.	Amount of Pensions for 1870.	Amount of cash certified to the Hon. Provincial Treasurer as payable to pensioners from 1st January to 30th December.	Period for which the payments were made.
				\$ cts.	\$ cts.	
237	Thomas Dorothey.....	59	34	79 33	75 33	For the year 1870.
238	Thomas Whitfield.....	61	32½	75 84	71 84	
239	William Beaton.....	73	16½	37 34	33 34	
240	John Robinson.....	68	17	39 67	35 67	
242	James Briggs.....	59	37	86 33	82 33	
243	James Denman.....	68	37½	87 50	83 50	For the years 1869 and 1870.
244	Adam Gillespie.....	72	24	56 00	52 00	
245	John Graydon.....	66	30	70 00	66 00	
246	Charles Judge.....	60	17	39 67	35 67	
247	John Ross.....	60	22	51 33	47 33	
248	John Roberts.....	69	16	37 34	*125 34	For the year 1870.
249	Alexander Fraser.....	62	14	32 67	*108 67	
251	Mary Crooks.....	50	15	*90 00	90 00	
252	William Lewis.....	53	22½	*135 00	105 00	
253	John Russell.....	65	30	*180 00	124 00	
254	George Wilson.....	71	20	*120 00	100 00	For the year 1870.
255	W. P. McGrane.....	77	38½	*231 00	127 64	
256	John Colville.....	64	17	*102 00	94 00	
				†6376 00		

NOTE.—In the above table, where the number is omitted, the pensioner is either dead, has resumed teaching, or has withdrawn.

* Pensioners receive, for the first year in which they are placed on the list, an amount at the rate of \$6 per year of service. After the first year they receive a smaller amount, as the fund does not admit of continuing the high rate.

† In addition to the above, \$124 was returned to subscribers withdrawing from the fund.

TABLE O.—GENERAL ABSTRACT.

COUNTIES FROM WHICH THE FOREGOING SUPERANNUATED TEACHERS APPLIED.			RELIGIOUS DENOMINATIONS.		NATIVES OF	
Glenarry	16	12	Church of England	86	Ireland	120
Stormont	10	3	Presbyterian	67	Scotland	70
Dundas	7	8	Church of Rome	40	England	30
Prescott	6	3	Methodist	35	Ontario	19
Carleton	12	8	Baptist	8	United States	11
Grenville	10	4	Congregationalist	8	Quebec	2
Leeds	14	1	"Protestant"	2	Wales	1
Lanark	21	4	Universalist	2	Nova Scotia	2
Renfrew	2	8	Society of Friends	1	New Brunswick	1
Frontenac	7	2	Christian Disciple	1	Total	256
Addington	4	2	Second Advent	1		
Prince Edward	6	2	Not given	10		
Hastings	7	7	Total	256		
Northumberland	8	1				
Durham	3	6				
Peterborough	8	4				
Victoria	6	5				
Ontario	5	1				
York	11	3				
Peel	8	3				
Total	8	256				

Of the 256 Teachers admitted to the Fund, 125 either died during or before 1870, were not heard from, resumed teaching, or withdrew from the Fund.

Of the remaining 131, the average length of service as Common School Teachers in Ontario was 21 years.

The average age of each pensioner in 1870 was 63 years.

Of the 256 Teachers admitted to the Fund, there have been 243 males and 13 females.

TABLE P.—Educational Summary for Ontario.

MUNICIPALITIES.	COMMON SCHOOLS.			GRAMMAR SCHOOLS.			OTHER INSTITUTIONS.				GRAND TOTAL.			Balance Unexpended.		Total amount available for Educational purposes during 1870.	
	No. of Common Schools.	No. of Common School Pupils.	Amount expended for Common School purposes during 1870.	No. of Grammar Schools.	No. of Grammar School Pupils.	Amount expended for Grammar School purposes during 1870.	No. of other Educational Institutions.	No. of their Pupils.	Amount received by other Educational Institutions during 1870.	Amount expended for Supernumerated Teachers, Normal School, &c.	Total No. of Educational Institutions.	Total No. of Pupils attending them.	Total amount expended for Educational purposes during 1870.	\$	cts.	\$	cts.
Glengarry.....	77	5456	12302 61	1	60	831 05	4	115	1527 00	395 00	82	5631	15055 66	1631 44	16087 10	16087 10	16087 10
Stormont.....	72	5216	14032 89	1	33	874 06	1	151	241 00	196 00	74	5400	15343 95	2215 30	17559 85	17559 85	17559 85
Dundas.....	78	5872	16022 09	2	173	1990 00	.....	.....	.....	196 00	80	6045	18208 09	1504 34	19712 43	19712 43	19712 43
Prescott.....	75	4013	9735 31	1	110	1438 00	.....	.....	.....	110 00	77	4123	11283 31	2778 25	14061 56	14061 56	14061 56
Russell.....	99	1816	5708 12	1	33	424 00	.....	.....	.....	.....	30	1849	6222 12	4010 27	10232 39	10232 39	10232 39
Carleton.....	126	8371	23930 61	2	67	1888 00	4	30	438 00	408 00	132	8468	28664 61	4082 22	32746 83	32746 83	32746 83
Greenville.....	89	6261	18231 47	1	129	1797 39	3	26	25 00	245 00	94	6416	20298 86	1338 83	21637 69	21637 69	21637 69
Leeds.....	160	9943	32783 35	1	224	2465 25	3	38	621 00	291 00	165	10205	36160 60	7497 00	43657 60	43657 60	43657 60
Leamark.....	126	8059	37922 01	4	241	4112 52	2	6	27 00	310 00	133	9206	42371 52	4244 00	46615 52	46615 52	46615 52
Renfrew.....	163	6266	21265 21	3	119	2099 10	2	33	119 00	257 00	108	6418	23770 31	2480 94	26251 25	26251 25	26251 25
Frontenac.....	129	7344	24311 71	.....	.....	.....	3	12	110 00	311 00	132	7556	24732 71	3169 58	27902 29	27902 29	27902 29
Addington.....	71	4728	13099 91	1	139	1151 03	1	27	56 00	196 00	73	4894	16502 94	1628 09	18131 03	18131 03	18131 03
Lennox.....	42	2923	9600 26	1	163	1481 57	4	90	382 00	.....	47	3176	11463 83	829 89	12293 72	12293 72	12293 72
Prince Edward.....	84	5896	26541 32	1	85	1490 06	2	63	497 00	169 00	87	6044	28785 38	1932 41	30718 27	30718 27	30718 27
Hastings.....	149	12560	43966 31	3	216	3117 24	8	450	23181 00	225 00	160	13226	70433 55	9800 41	80233 96	80233 96	80233 96
Northumberland.....	122	12560	43741 80	3	309	5138 31	14	491	34110 00	225 00	139	12056	43325 11	4335 54	87550 54	87550 54	87550 54
Durham.....	102	10599	40394 01	3	264	4891 33	7	81	1395 00	90 00	112	10944	46770 34	4022 38	50792 72	50792 72	50792 72
Peterborough.....	89	8149	34193 83	2	274	3782 74	5	80	920 00	130 00	96	8503	39027 57	5540 28	44567 85	44567 85	44567 85
Victoria.....	108	9432	34062 91	3	194	2209 15	1	25	618 00	115 00	112	9651	37005 06	5004 08	42009 14	42009 14	42009 14
Ontario.....	117	13775	52079 17	5	513	7588 88	7	126	791 00	75 00	129	14414	60334 05	5779 15	66113 20	66113 20	66113 20
York.....	154	16902	63527 88	4	239	3901 09	16	200	2761 00	205 00	174	17341	76394 97	10406 98	86801 97	86801 97	86801 97
Peel.....	79	7927	32477 10	2	159	1994 94	4	28	212 00	171 00	85	7914	34855 04	3112 93	37967 97	37967 97	37967 97
Simcoe.....	173	17267	58510 10	3	138	3211 83	5	80	271 00	192 00	181	17485	62184 93	7619 73	69804 66	69804 66	69804 66
Halton.....	60	4484	34202 65	2	89	1564 39	5	91	302 00	74 00	67	6614	36143 04	1035 05	37178 99	37178 99	37178 99
Wentworth.....	80	8229	36053 87	2	182	2668 79	4	92	1120 00	119 00	86	8503	39961 66	4009 07	43970 73	43970 73	43970 73
Brant.....	67	8313	39211 53	4	228	4393 19	.....	216	1617 00	230 00	79	8757	45451 72	5184 96	50636 68	50636 68	50636 68
Lincoln.....	79	7715	35250 23	5	241	6924 79	5	8	710 00	100 00	89	8046	42825 02	9176 78	51461 80	51461 80	51461 80
Welland.....	93	7312	31848 04	4	285	5371 10	3	95	216 00	90 00	100	7694	37525 14	7738 10	45263 24	45263 24	45263 24
Haldimand.....	83	7179	30513 91	3	177	2486 43	2	65	148 00	86 00	88	7421	33234 34	5747 67	38982 01	38982 01	38982 01

[illegible]

TABLE Q.—A General Statistical Abstract, exhibiting the comparative State and progress of Education in Ontario, as connected with Universities, Colleges, Academies, Private, Grammar, Common, Normal and Model Schools, from the year 1842 to 1870, inclusive, compiled from Returns in the Educational Department.

No.	SUBJECTS COMPARED.	1842	1843	1844	1845	1846	1847	1848
1	Population of Ontario	486055			622570	204580		725879
2	Population between the ages of five and sixteen years	141143			202913	5	230975	241102
3	Colleges in operation	5			5	5	6	6
4	County Grammar Schools	25			25	32	31	33
5	Academies and Private Schools reported	44			65	80	96	117
6	Normal and Model Schools for Ontario						2	2
7	Total Common Schools in operation as reported	1721		2610	2736	2589	2727	2800
8	Total Roman Catholic Separate Schools		No Reports.	No Reports.	No Reports.	No Reports.	No Reports.	No Reports.
9	Free Schools reported in operation (included in No. 7, above)	1795	2700	2700	2837	2706	2853	2958
10	Grand Total Educational Establishments in operation in Ontario	No Reports.	No Reports.	No Reports.	No Reports.	No Reports.	700	740
11	Total Pupils attending Colleges and Universities						1000	1115
12	Total Pupils attending County Grammar Schools						1831	2345
13	Total Pupils attending Academies and Private Schools							256
14	Total Students and Pupils attending Normal and Model Schools for Ontario							130739
15	Total Pupils attending the Common Schools of Ontario							
16	Total Pupils attending the Roman Catholic Separate Schools							
17	Grand Total, Students and Pupils attending Universities, Colleges, Academies, Grammar, Private, Normal, Model and Common Schools	65978	96756	96756	110002	101912	124829	135195
18	Total amount paid for the Salaries of Common and Separate School Teachers in Ontario							
19	Total amount paid for the erection or repairs of Common and Separate School Houses, and for Libraries and Apparatus, Books, Fuel, Stationery, &c.	65978		96756	110002	101912	128340	135195
20	Grand Total paid for Common and Separate School Teachers' Salaries, the erection and repairs of School Houses, and for Libraries and Apparatus.	\$166000	\$206836	\$206836	\$286056	\$271624	\$310396	\$344276
21	Total amount paid for Grammar School Masters' Salaries	No Reports.	No Reports.	No Reports.	No Reports.	No Reports.	No Reports.	No Reports.
22	Total amount paid for the erection or repairs of Grammar School Houses.							
23	Amount received by other Educational Institutions, &c.							
24	Grand Total paid for Educational purposes in Ontario				2860	2925	3028	3177
25	Total Common School Teachers in Ontario						2305	2507
26	Total Male						663	670
27	Total Female							
28	Average number of months each Common School has been kept open by a qualified Teacher, including legal holidays.		7½	8	8	8½	8½	9

TABLE Q.—Continued.

No.	1849	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859
1.		803403	950551	955239							
2.	233304	232258	258607	262755	208557	277912	297623	311316	321888	300578	332085
3.		7	7	8	8	9	10	12	12	12	13
4.		57	54	60	64	61	65	61	72	75	81
5.		224	175	181	186	206	307	267	276	301	321
6.		2	2	3	3	3	3	3	3	4	4
7.	2871	3059	2985	2992	3093	3200	2284	3391	3631	3772	3848
8.			16	18	32	44	41	81	100	94	105
9.	No Reports.	252	855	901	1052	1117	1211	1263	1707	1936	2315
10.	3076	3349	3239	3262	3386	3526	3710	3815	4258	4258	4094
11.	773	684	632	751	756	806	1100	1335	1335	1373	1373
12.	1120	2070	2191	2343	3221	4287	3746	3386	4073	4459	4381
13.	3648	4065	4557	5684	4440	5473	7584	6220	6523	6372	6182
14.	400	370	356	645	735	622	772	746	777	777	718
15.	138465	151891	168159	179587	194736	204168	222979	243335	262673	283692	288598
16.							4885	7210	9964	9991	12994
17.	144406	150678	175895	189010	203888	215356	240917	262858	285314	306626	314246
18.	8333912	\$853716	\$391308	\$428948	\$48764	\$78808	\$680108	\$779680	\$860232	\$777616	\$859325
19.	No Reports.	\$56756	\$77336	\$100366	\$128072	\$15472	\$219164	\$298128	\$351926	\$265519	\$250721
20.		\$410172	\$408344	\$529314	\$617836	\$754340	\$899272	\$1078108	\$1212158	\$1043135	\$1110046
21.	No Reports.						\$46255	\$47459	\$7552	\$72940	\$61564
22.							\$5711	\$8311	\$10708	\$28468	\$7980
23.							\$204754	\$192014	\$214849	\$229979	\$210042
24.			\$131336	\$147956	\$150104	\$174916	\$204754	\$192014	\$214849	\$229979	\$210042
25.		\$369980	\$39980	\$677270	\$767940	\$928356	\$115592	\$1326692	\$145267	\$1318922	\$138582
26.	3209	3476	3277	3388	3539	3565	3689	3689	4083	4202	4255
27.	2505	2687	2541	2541	2601	2508	2568	2622	2787	2965	3115
28.	704	847	726	847	938	1031	997	1067	1296	1237	1120
29.	911	911	911	911	93	93	93	10	10	104	104

NOTE.—Balances due, but not collected, were included until 1858, but from that date Nos. 18, 19, 20, 21, 22 and 24 represent actual payments only. If we add to the Grand Total [24] the unexpended balances, we should have an available sum of \$2,414,056 for Educational purposes during 1870, and for 1869, \$2,273,903, the increase in 1870 being \$140,152.

TABLE Q.—*Concluded.*

No.	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870
1.	1396091	412367	403302	412367	424565	426757	431812	447726	464315	470400	483966
2.	384980	13	13	16	16	16	16	16	16	16	16
3.	88	86	91	95	95	104	104	102	101	101	101
4.	305	337	342	340	257	260	298	312	282	279	284
5.	4	4	4	3	3	3	3	3	3	3	3
6.	3854	3910	3995	4013	4077	4151	4222	4261	4318	4339	4403
7.	115	109	109	120	147	152	157	161	162	165	163
8.	2602	2903	3111	3228	3459	3595	3741	3838	3986	4131	4244
9.	4379	4439	4554	4587	4595	4686	4800	4855	4882	4923	4970
10.	1373	1373	1373	1820	1820	1820	1830	1930	1930	1930	1930
11.	4546	4765	4982	5352	5589	5754	5779	5696	5649	6008	7351
12.	6408	7361	6784	6553	5718	5965	6462	6743	6655	6392	652
13.	700	700	700	700	700	800	800	800	800	800	800
14.	301104	316287	329033	344949	354330	365552	372320	382719	394305	411746	421866
15.	14708	13631	14700	13839	17365	18101	18375	18924	20594	20684	20632
16.	328839	344117	357572	375333	385322	397962	405266	410812	434933	448100	450161
17.	885591	891813	895976	8987535	8996956	9041052	91066880	91093516	91146543	91173166	91222681
18.	294183	2973365	2972217	2966892	288362	314827	3320453	379672	341891	349730	3489380
19.	\$1159774	\$1191418	\$1231993	\$1254447	\$1285318	\$1353879	\$1387233	\$1473188	\$1588434	\$1621896	\$1742061
20.	\$64005	\$71034	\$73211	\$76121	\$73854	\$81562	\$87055	\$94820	\$93848	\$97009	\$105153
21.	\$3037	\$4254	\$7302	\$7470	\$6139	\$8251	\$17053	\$19190	\$10247	\$7378	\$20300
22.	\$21832	\$209421	\$222534	\$287768	\$269668	\$274514	\$328065	\$332825	\$335630	\$334500	\$336107
23.	\$144848	\$1476107	\$1535240	\$1621806	\$1636979	\$1717206	\$1820006	\$1920023	\$2027199	\$2039783	\$2173711
24.	4281	4336	4406	4504	4625	4721	4789	4890	4996	5054	5165
25.	3100	3031	3115	3094	3011	2930	2925	2849	2775	2753	2753
26.	1181	1365	1291	1410	1614	1791	1864	2041	2219	2279	2412
27.	10½	10½	10½	10½	11½	11½	11½	11½	11½	11½	11½
28.											

NOTE.—The Returns in the foregoing Table, up to the year 1847, are not very complete, but since that period they have been sufficiently so to establish data by which to compare our yearly progress in Educational matters. The Returns are now pretty extensive, and embrace all Institutions of Learning from the Common School up to the University; but hitherto the sources of information regarding this latter class of Institutions have been rather private than official, which should not be the case. The Annual Report of a Department of Public Instruction should present, in one comprehensive tabular view, the actual state and progress of all our Educational Institutions Primary, Intermediate and Superior.

PART III.
—
APPENDICES.
1870.

APPENDICES TO THE ANNUAL REPORT

OF THE

NORMAL, MODEL,

Grammar and Common (now High and Public) Schools

IN ONTARIO.

FOR THE YEAR 1870.

APPENDIX A.

REPORT AND SUGGESTIONS WITH RESPECT TO THE COUNTY GRAMMAR, (NOW HIGH,) SCHOOLS OF ONTARIO, FOR THE YEAR 1870, BY THE REV. J. G. D. MACKENZIE, M.A., INSPECTOR.

REVEREND SIR,—Having sent in to the Department my semi-annual reports, more or less in detail, of the results of my inspection of our High Schools during the past year, I have the honour now to submit the usual Annual Summary. In giving a general view of the condition of the schools, my previous Report might be made to answer, with slight modification. The system remaining unchanged, we have had no reason for expecting any marked change in the working of the schools. Whilst in Classics and Mathematics (including that practical and very important subject, Arithmetic), and in French, the results achieved are much on a par with those of the year immediately preceding, I must, however, state that increased efforts have certainly been made in the cultivation of the Mother-tongue, and that, not without encouraging fruits in a better knowledge of English Grammar, and more of ability, on the part of pupils, to write their native language correctly. A fair view of the schools would not be furnished without making this statement, neither would justice be done to those earnest and laborious men who have been exerting themselves to remedy an evident defect, as best they could under a system which kept pouring in upon them an undisciplined horde of raw recruits, and worrying them besides with the drudgery of drilling in compulsory Latin Classes, formed out of this rough and unpromising material.

1.—CHANGE OF MASTERS.

During the past year several of the schools have changed their masters; of these, some have changed for the better, and under the inspiration, which, in the worst of circumstances, the man of the right stamp will never completely fail to impart, have begun to move forward as vigorously as a repressive programme would allow them; others have made a change for the worse. In relation to these unfortunate changes, so far as they

have been brought about by a short-sighted economy on the part of trustees, or by their enforced poverty under the old law, it is gratifying to know that under the new system, with its stimulating provision of payment for results, trustees will be greatly aided in forming a just estimate of the master's attainments and fidelity, and, where they have a good man, will find it to be more than ever their interest to keep him. It has been well said, "Do what you will in building, or endowing, or encouraging, a school; make for it the most convenient premises; place it in the most favourable situation; give it every advantage of government, wealth, or patronage; after all, the teacher is the pivot on which success or failure turns." Everywhere this may be regarded as an axiom in school administration; and particularly with ourselves when the amount of legislative grant to each school will be directly affected by the teacher's efficiency. The introduction of this new principle, as we confidently hope, will bring home, even to minds whose one idea in school matters has hitherto been to save money, the truth of the wise old saying,—“The cheapest pennyworths are not always the best bargains.”

2.—SCHOOL BUILDINGS AND FURNITURE, DRILL AND GYMNASTICS.

The High School Boards of Trustees are now invested with full power to raise all the money they need for the legitimate expenses of the schools. They are no longer in the humiliating and helpless position they occupied in cases where the School Boards were not united. They are not to wait, henceforward, cap in hand, on Municipal Councils, and sue for that which they have now a legal, as they had always a moral right to demand. Sundry shortcomings—perhaps inevitable under the old regime—towards which a merciful and wise forbearance has been exercised, should be rectified now as speedily as possible, and every effort made to conform strictly to the explicit regulations set forth by the Council of Public Instruction.

Some of our High School buildings are—as to two or three of them, so entirely unsuitable; as to the rest, so unattractive, and even forbidding in appearance—so absurdly out of keeping with the appellation “High School,” that, in my judgment, they should be tolerated not one moment longer than the time that may be required for the erection of better. The new arrangements for inspection, which have been so happily accomplished have given me a colleague who will have opportunity for criticising these structures, which an acquaintance of three years has not endeared to my own eye or heart, and if he, as well as myself, should pronounce against them, I trust they will soon be made to disappear. We wish to feel respect, not only for the learning to be had at our High Schools, but for the temple in which that learning is enshrined. We desire to see, in every case, an edifice which shall appeal, with more or less of the charms of external beauty, to the eye and mind of the young; and, as to internal arrangements, I shall not be satisfied till I see every school-room so furnished as to lead the young minds in it to place a higher value on the knowledge they are incited to acquire, when they observe and instinctively appreciate—as they will not fail to do—the pains taken to maintain a proper convenience, cleanliness, and grace in everything associated with the acquisition of that knowledge. All, in the matter of building and furniture, may not hope to rival Toronto, Hamilton, or Galt, and others of like stamp; all are not called upon to aim at the stately and the ornate; but even the comparatively small and feeble section ought to do its best to make everything neat, commodious, and wholesome—health of body provided for by sufficient space and purity of air—culture of mind promoted by exhibiting education with nothing shabby or sordid in her attire, but in fair and comely garb; with adequate means of raising money, let us hope that we have seen the last of superannuated wood and sickly paint, of huge cumbersome desks, and diminutive black-boards. Of all the appliances made use of in the work of the school there is probably none more serviceable than the BLACK-BOARD, not only employed by the master in giving instruction to his pupils, but capable also of being so managed, as to put the pupils in the way of instructing one another simply by subjecting the work of any member of the class to the criticism of the rest. The effect of such an exercise is excellent. Corrections made by the master are too often received with an equanimity and a composure which give but poor promise of the pupil's performance when the same points come up again; errors, on the other hand, pointed out by a school-fellow inflict a deeper wound on self-esteem, and are seldom repeated. It is easy to understand

that, whilst a class is thus engaged at the black-board, an amount of vigilance and keen interest is developed, which no alertness or remonstrance on the master's part will excite: the apathy that so terribly chills the master's heart is dispelled; and the whole class, for the time, are on the *qui vive*. The black-board should be large enough to admit of this, extended, if necessary, along one side of the school-room. I have always set a special value, moreover, on the black-board as contributing to the life and freedom of independent teaching,—the teaching of the individual man which brings mind into contact with mind so much more effectually than Text-books can do. There is no doubt in some minds an impatient endurance of the Text-book, with a vehement propensity for launching out into a crude originality more gratifying to themselves than improving to those whom they are set to teach; but bad as this is, it is worse to resolve the whole of education into memorizing Text-books; worse to bind the young mind to such a servile adherence to the Text-book as represses effectually all mental activity and independence of thought.

Where University Honours have been won by any of the pupils, I should like to see in a conspicuous position a TABLET like that which has been placed in the Hall of Upper Canada College, to record these Honours.—The tablet should be made attractive in appearance, with the names of the successful men tastefully inscribed on it, and the school-room, I need hardly say, ought not to be unworthy of such an ornament. This roll of fame would help to perpetuate the prestige of the school and powerfully excite the emulation of the pupils. If Dundas and Fonthill become associated with the Gilchrist Scholarship—the young man sent up from the former going directly from the school; in the other case, gaining the valuable prize after having passed through the University of Toronto—why should there not be a permanent record of a distinction so honourable, publicly exhibited to inspire others with like ardour and ambition?

Our Drill Classes, I am sorry to say, are, with one or two exceptions, extinct; this is to be regretted. I must also mention with regret that, scarcely any of our High Schools make provision for Gymnastic exercises. We require not, surely, to be reminded that success in mental culture depends largely on the healthy condition of the physical frame, and that this is much promoted by regular training.

NEW PROGRAMME—ENGLISH LANGUAGE AND LITERATURE, PHILOLOGY.

The new Programme for High Schools is now before the country in provisional form and subject to such modification as, after trial, may be deemed desirable. It may be necessary to make alterations in the details of its arrangement, for no scheme of study can well be pronounced satisfactory, in all its parts, before it has been put to the test of actual experiment; but, as to its general principles, it will be cordially welcomed as making wise and suitable provision for the educational wants of the country.

After its experience of compulsory Latin and neglected English, the country will be well pleased to find, at the very head of the Programme, the culture of the Mother-tongue. It has been the fashion till within the last few years to assert, as a truth not to be gainsaid, that no basis of education admitting of a sound and perfect superstructure could possibly be laid but in the ancient Classics. For ages, our language, with all its beauty and strength; our literature, with its unsurpassed wealth of intellectual treasure, were made to move in the train of classical learning, like some wretched captive, much in the style of the old Roman triumph. What has been the effect in England, where the study of the Classics has been carried on under all the advantages that wealth and leisure and the highest scholarship can command? We have the result given in the statement of one—a graduate and fellow of an English University,—who, whilst he fully recognizes the true value of the Classics, can see that to vindicate their just claims it is by no means necessary to do dishonour to the Mother-tongue. "Half the undergraduates at our University (says Mr. Sidwick), and a larger proportion of the boys at all (except perhaps one or two) of our Public Schools, if they have received a literary education at all, have got it for themselves; the fragments of Greek and Latin that they have struggled through have not given it to them. * * * If such boys get imbued with literary culture at all, it is not owing to the classical system, it is due to home influence, to fortunate school friendships, to the extra professional care of some zealous schoolmaster. In this way they

are taught to enjoy reading that instructs and refines, and escape the fate of the mass, who temper small compulsory sips of Virgil, Sophocles, Tacitus, and Thucydides, with large voluntary draughts of James, Ainsworth, Lever, and the translated Dumas." This is not a very cheering sketch, yet the picture is a bright one compared with the position as it was of some three-fourths of the pupils of our Grammar Schools—in school excursions hither and thither through an Introductory Book, which too often introduced to nothing, or, at best, a nibbling at the edges of Cæsar or Virgil, with grateful acceptance of author's liberal aids, but with little appreciation of the spirit of the author or comprehension of the language; *out of school*, sensational novels of the lowest class devoured—wonderful ten cent publications with covers highly emblematic of the trash within. This mockery of education has been summarily disposed of. Under the better system which we have obtained at last, the minds of our youth will be guided to a higher literature and a purer taste. No doubt a good deal of special care and effort in this department will be required of our High School-Masters, the more so as we stand much in need of School Editions of English Classics, annotated as we have the Ancient Classics, and with notes prepared, not only to answer the purpose of mere illustration, but with a view to the application of received laws and principles of criticism to the beauties or blemishes of the text. A word in passing may be bestowed on COMPARATIVE PHILOLOGY, which, though of recent origin, has occupied the minds of some of our best writers, and has already secured for itself a high place in the work of education. It will scarcely be possible to give full and systematic instruction in this subject, except to those candidates for honours at Matriculation, or to those who are seeking to qualify themselves for Teachers' Certificates, who will receive special attention outside the ordinary routine of school work. Still it is conceived that our High School Masters, who have bestowed attention on a study so peculiarly interesting, may find, at least, occasion now and then, to impart to the advanced pupils something of what is to be learnt from such writers as Latham, Max Müller, Farrar, and Trench. Much of valuable knowledge, throwing light not only on the structure of language, but on the history of our race, will be within the reach even of those pupils who are not to proceed beyond the vernacular, though those who take the classical course will enjoy an evident advantage.

PHYSICAL SCIENCE.

The prominence given to PHYSICAL SCIENCE, and the ample provision made for it in the English course is matter for special congratulation. It would be gratifying if, after the actual working of the programme for a time, it were found practicable to introduce more of Science than Natural History (Chemistry, for example), into the classical course. The Council of Public Instruction was no doubt anxious to sheer clear of the great practical evil of attempting too much, and it may well be that the powers of both masters and pupils would be overtaken by endeavouring to combine with the study of the Ancient Classics any larger quantum of Natural Science even in the "optional" form. If this be so, the necessity must be submitted to with regret. As to the effect of teaching Science in school, it is very encouraging to receive a report like the following of the great Classical School of Rugby—a report which rests upon the authority of a Committee, including amongst its members, Professor Huxley, Professor Tyndall, the Rev. F. D. Farrar, and others of note in the world of literature and science:—

"What are the general results of the introduction of scientific teaching in the opinion of the body of Masters! In brief it is this, that the school as a whole is the better for it, and that the scholarship is not worse. The number of boys whose industry and attention are not caught by any school study is decidedly less; there is more respect for work and for abilities in the different fields now open to a boy; and though pursued often with great vigour, and sometimes with great success, by boys distinguished in Classics, it is not found to interfere with their proficiency in Classics, nor are there any symptoms of overwork in the school. This is the testimony of the classical masters, by no means specially favourable to science, who are in a position which enables them to judge. To many who have left Rugby with but little knowledge and little love of knowledge, to show as the results of their two or three years in our middle school, the introduction of science into our

course has been the greatest possible gain ; and others who have left from the upper part of the school, without hope of distinguishing themselves in Classics or Mathematics, have adopted Science as their study at the Universities. It is believed that no master in Rugby School would wish to give up Science and recur to the old curriculum."

CONCLUDING REMARKS. ERRORS OF THE OLD SYSTEM. TRUE VALUE OF CLASSICAL STUDY.

You have good cause for saying, Reverend Sir, that "the School Act of 1871 has laid the foundation of a new era in the Public School education of our country." That new era has opened upon us with the most favourable auspices. Not only have the errors of the past been rectified ; not only has a new system been constructed on sounder principles ; there is, besides, the general prevalence of more correct views on education to guarantee to that system a fair trial, and to encourage the men whose special duty it will be to carry it out. Except in very few minds, which still cling to the old routine, prejudice has been dispelled, and a light has dawned which could no longer be resisted, since the failure of the system built on the blind worship of the Classics has been so notorious and so complete, that scarcely a single voice is raised to defend it. There is many a man of my own day who will remember how the case stood in school some thirty years ago, when Latin and Greek bore absolute sway ; when Mathematics, indeed, but Mathematics alone were permitted to move along with them, *pari passu* ; when Science was imparted in homœopathic proportions, whilst Mythology was administered in the strongest doses ; when Philology, which forms a study so valuable and so attractive now, was unknown ; when the boy had to work so hard at dead languages that he could only manage at best to catch in passing a few faint glimpses of that region of surpassing beauty, the structure and literature of his own living Mother-tongue.

It was deemed a hopeless quest then to seek respectable scholarship outside the charmed circle of classic lore ; nay, it was almost held a sort of heresy to doubt that the agonies of *Onæ genus*, *As in presenti*, and the rest, (and what agonies they were many a luckless youth could tell!) were indispensable to literary parturition,—versifying in those days was carried on with as much vigour as though the highest aim that could be offered to a boy's ambition was to become a Latin poet. But the worst feature of all was the accumulation of lumber on the brain in the shape of "fables and endless genealogies" of Heathen Mythology—the feats of memory accomplished in this line being at times prodigious. Every facility was afforded for indoctrinating the young mind in everything that concerned the "impure rabble of the Heathen Baalim." It is true, the worst of the strange stories clustering round Olympus were not detailed in the class-room, but then the subject itself was made so much of, and the book that formed the repository of much treasure, the schoolboy's *vade mecum*—Lempriere's Classical Dictionary, was so constantly in request, that it was too much to expect that the young student should take from it only the comparatively harmless, and shun that which it was taint to touch ; and so a prurient curiosity was too easily excited by glimpses of scenes which ought to have been religiously kept back from the young mind which soon learned to search for legends not all like that of Eros and Psyche, with its deep and sweet lesson of the soul's passage through earthly passion and misfortune to celestial felicity. When from the mass of Heathen fable laboriously committed to memory in schools in bygone days we deduct just what is required to illustrate the text that is being read, there still remains a large amount worthless, or nearly so, for the purpose of true education. This has been happily swept away and so necessary does that cleansing of the educational temple seem to us now, that we can only contemplate with simple amazement the fact, that so much time could ever have been given to such a subject, when in history and science and language we find that a lifetime is all too short to occupy the mind with what is instructive and improving, fresh and pure, beautiful and true, with better conceptions of what education is,—with a deep impression that it means a real quickening of the minds of the people. The generations to come are not at all likely to repeat the blunder of their forefathers. There is but little danger of Sapphics ever again driving out Science, or of legend monopolizing what is due to language. There is danger, however, on the other hand, that public opinion may be carried

too far by the strong impulse which is now acting upon it and that Science,—so to speak—may be made to avenge herself on the Ancient Classics for the wrong they have done her.

The present Bishop of Manchester tells us that, whilst engaged in looking into the School System of the United States, he frequently heard the complaint, and that from some of the best educationists in the country, that the physical sciences were crowding out not only the Greek and Latin Classics, but even Mathematics and English Literature. The protection of the last two subjects of study was wholly in the hands of our authorities, and they have extended full protection to them in the Programme they have issued. In regard to the study of the Classics, it was not within their power to do so much; they have set forth a Classical Course, but, it will depend upon the temper of the public mind whether many or few embrace it. Let us hope that our good Classical Schools which shall do real work will be well supported, and that the Classics properly studied will not be allowed to fall into a disrepute which they by no means deserve. We may have erred in the past, in oppressing the memory with a mass of worthless fiction; we may have made a mistake in bestowing so large an amount of time on the vehement effort to rival Horatian *Alcaics*, when matters far more serious were crying aloud to us from the corners of the streets; but we can make no mistake in assuring ourselves that to the young student a mine of rich treasure has been presented when the literature of the old Greeks and Romans is really thrown open to him; that he has realized a positive gain of no small value when he has truly mastered an Oration of Cicero, a book of the *Æneid*, or the *Odes* of Horace; and that his mind has been most certainly brought into invigorating contact with influences which deserve to be called, in the highest sense, Education; when it has learned to enjoy the world of beauty spread before it in the lofty thought, and the noble diction of the Grecian Drama. Education, like wisdom, “is justified of all her children; and in her family, where there is no sacrifice of practical fitness to favourite theory, there is no antagonism either.

I have the honour to be,

Reverend Sir,

Your obedient servant,

J. G. D. MacKENZIE.

The Reverend EGERTON RYERSON, D.D., L.L.D.,
Chief Superintendent of Education for the
Province of Ontario.

APPENDIX B.*

EXTRACTS FROM REPORTS OF COUNTY LOCAL SUPERINTENDENTS OF COMMON SCHOOLS
(NOW INSPECTORS), RELATIVE TO THE STATE AND PROGRESS OF EDUCATION IN
THEIR RESPECTIVE COUNTIES, &c., FOR THE YEAR 1870.

COUNTY OF HASTINGS.

T. S. Agar, Esquire, North Hastings.—Under the head of *Improvement in the Schools*, I purpose briefly reviewing the progress of the teachers as well as pupils. To do so justly, I must contrast the past with the present state of both of them. The teacher of the past (and but comparatively recent date) had, in the rear townships, but few regularly trained teachers to instruct or guide him in his duty; few whose example he could follow, who had been trained and educated for the business. Now there are many teachers in the riding thoroughly trained for the business, whose example and influence are exerting great and beneficial effects upon pupils and teachers. The cleanliness of the School-house, the easily maintained discipline of the pupils, the evident pleasure with which they take their places in the classes for examination, render the duty of examiner, whether Superintendent or teacher, a pleasure,

* The extracts from Superintendents of individual townships are omitted this year.

and are the best evidences of a teacher's training and of the pupil's progress. Short lessons, thoroughly learned and understood, are the general rule. The progress, though apparently slow, is, in truth, rapid. The pupil becomes confident, reliant on his teacher and on himself, and in fact they stimulate each other to continued exertions. Ten years hence, when this present School generation shall have taken their places in the County, a well-informed population will doubtless exert a powerful influence on its future.

School Section Libraries. To feed and keep alive the love of good books, in order that we may widen and build upon the foundation laid in the Schools, I look upon these libraries as most important accessories. Within the section, books from the library are always obtainable by some of the family, in township libraries they are not so; on the contrary, they are to the majority of the inhabitants difficult to obtain; the time required, the distance to travel, being so many obstacles to overcome, and, in certain seasons, very serious ones. To render School Section Libraries more general, and therefore more extensively beneficial, I think something like the following plan might be adopted. Let these adjoining Sections unite for library purposes. Let each Section purchase the same amount of books, but neither of them the same books. At the expiration of the first year, let School Section No. 1 pass their library to School Section No. 2, that Section to No. 3, and No. 3 to No. 1; at the end of the second year another change of books to take place, and by the end of the third year, the three Sections will have completed the reading of the three sets of books, without any cost but that of the first purchase; when the same method can be again pursued by purchase, &c.

Public School Examinations.—I held one public Township Examination in Marmora. The prize books were purchased by a donation of \$10.00 from Mr. Chisholm, of Marmora, and a like donation from the Town Council of that township. Twelve of the prize books were competed for at the township examination, the balance of them were divided among the other Schools, and were subsequently competed for at the several Sectional Schools. The prize books were well selected by the Department, and gave, as they have in the very many cases coming under my notice, general satisfaction. In addition to this township examination, I held a public examination at each School in the Riding. To do this successfully, I addressed a letter to each teacher, giving the date and hour of my attendance, requesting the examination to be made as public as possible, and urging the teachers to attend each other's School examination. These examinations were very satisfactory. I left the management of them in the hands of the teacher of the section, in order that the parents, visiting teachers and others might have an opportunity of witnessing the system upon which the School was conducted. At the conclusion of each examination I delivered a short lecture, and was generally followed by addresses from teachers, trustees, and friends of education. These examinations also afforded me an opportunity of addressing and conversing with the inhabitants of the several sections, and urging upon them any improvements I thought needful in the School-house, or the purchase of maps, apparatus, &c.

New School Houses. This work is steadily going on. Every year brings with it the erection of a stone, brick, or frame School-house, in two or more of the townships. In a few years hence, the old log School-house will have disappeared, yet doubtless held in dear remembrance by those educated in them.

COUNTY OF DURHAM.

John I. Tilley, Esquire, County of Durham.—I cannot indulge in that spirit of complaint against trustees and people on account of lack of interest in School matters, which seems so chronic in the reports of many superintendents. Our Schools have worked very harmoniously during the past year; and it certainly speaks well for the practicability of our School system, and for the faithful manner in which the School officers of each section have discharged their duties, when it can be said, that, during the past three years, not a single case of arbitration or litigation has occurred in the County, and that only one complaint has been made to the superintendent to set aside the action of the trustees. Most of our Schools have been supplied with very good teachers; but, unfortunately, there are some sections too small to pay sufficient salaries to enable them to compete with their more wealthy neighbours, and they must of necessity be content with cheap teachers, and inferior teaching. I trust that

the 16th clause of the new School Act may have the desired effect in mitigating the evil which weighs so heavily upon small sections. There is a laudable desire on the part of trustees to obtain and retain good teachers, and of good experience. As a proof of this, the salaries of many teachers have been raised at least ten per cent., and the number of teachers who changed schools at the end of the year was 13 less than it was in the preceding year. This I regard as a great improvement, and if the efforts put forth in the new School Act, to build up and retain a class of permanent teachers among us, by removing the objectionable features in the system of County Boards, furnishing residences in rural sections, &c., have the desired effect, it will be one of the greatest blessings that can be conferred upon our School system. The Schools in our County are making very decided improvement in the subject of intelligent reading. The system of explaining in familiar terms the principal words in every lesson, by the teacher, and of requiring the pupils to retain the information imparted to them, is carried out in every School. This practice, with frequent reading by the teacher, and explanation on the important points in a sentence, to be brought out, is accomplishing a great deal in making a class of expressive readers in our Schools, even in the first and second books. The chief drawback is, that many teachers themselves have but a poor idea of what constitutes good reading. The old system of learning to spell by conning line after line is nearly obsolete among us; the national Model School system of copying daily a portion of the reading lesson by the smaller pupils, and of dictation by the larger ones, is taking its place in all our Schools with gratifying results. The subject of Physical Geography is well taught. The Schools with very few exceptions are well supplied with maps, which are not allowed to hang as mere ornaments on the walls. Several sections obtained a fresh supply last year, and let me here remark that I have never heard the least complaint mentioned against the maps furnished by the Department; they have always been promptly obtained, and in good condition. The subject of grammar has suffered somewhat by changing text books. The pupils have not been promptly supplied with new books, and a serious obstacle has thus been thrown in the way of the teacher. Both books of the authorized edition are now pretty generally introduced, and I hope to see the standard rise. Davies' smaller grammar is a general favourite, but the same cannot be said of Smith's arithmetic. I have notified the people through the press, of the clause relating to compulsory attendance, and have urged trustees to warn those who are not carrying out its requirements; if this be done, the attendance for the future will show a marked increase. Arrangements have been made to organize a Teachers' Association in each of the ridings of the County, and I hope to be able at the end of the year to report two flourishing associations.

COUNTY OF PETERBOROUGH.

James Stratton, Esquire, Ashphodel.—I have found it difficult to obtain correct and full financial statements from the Boards of Trustees in the new settlements. This, I believe, arises in part from the fact that the men are engaged in the woods in the winter, and find but very little time to attend to their School affairs till spring, when they return home again. But another evil is, that for these poor "back" sections the trustees have great difficulty in procuring suitable teachers. Teachers do not like to go back into the woods fifty or even seventy miles for the small salaries that are offered, and the result is, that in backwood settlements, even the teachers pay but little attention to furnishing full statements of matters connected with their Schools, and to enforce it, under existing circumstances, would, very often, deprive some sections of teachers. We trust, however, to be able to educate teachers to take some little pride in sending in proper reports. The Townships of Burleigh, Anstruther, Chandos, and Cardiff are comparatively new settlements, and the Schools are necessarily far apart. The isolated nature of the different small settlements, makes it more burdensome to support the Schools. This may be expected, too, for some time yet. The people are making every reasonable effort to keep their Schools open, but the large extent of patented lands in those townships, makes it more burdensome, as the Government lands are not taxed. Your favourable attention is called to this fact, so that a little aid may be granted to those requiring it. There are two Schools in Methuen, that will re-

quire *aid* for many years. The settlements are very small, not more than *eight* or *ten* families in each. They are surrounded by Government lands—they will never be settled for farming purposes. The few, who are in, have difficulty in maintaining a School for even a portion of the year. The continuance of annual grants from the Poor School Fund is almost an absolute necessity, in order to enable them to afford their children a very limited education. Section No. 7, Belmont, is very little better off. The remaining sections of Belmont are able to support their own Schools, and during the last few years, a very fair class of teachers have been employed. In Asphodel, Otonabee, Smith, and North Monaghan, the people are able to support good Schools, and express their willingness to fairly remunerate good teachers, but other professions, offering greater inducements, lure away some of our most successful teachers. An evil in the old settled townships is forming small sections, which tends to engage a class of teachers, not well calculated to advance educational interests, but the smallness of the section limits the salary, and compels the trustees to engage such teachers as are willing to accept what they offer. Trustees are inclined to improve their School buildings, as the old ones show signs of decay, and the old townships can now boast of several very commodious brick School-houses. Section No. 13, Otonabee, can boast of a very neat new brick School-house. The trustees of No. 10., Otonabee, have let the contract for a new brick School-house, and others are contemplated ere long, so that School buildings are in full keeping with the progress of the country, with the exception of one or two dilapidated old log houses, which must soon give way to something better. The trustees of No. 3 Section, North Monaghan, erected a very fine brick School-house during the year. In this township, there are now three good School-houses. The Schools in Smith are in a very healthy state, efficient teachers are generally employed and fair salaries given. There is also a spirit of emulation among the teachers, that tends to keep up the status of the Schools, and to give energy to the teachers. In the small township of Ennismore, there are just three Schools. A superior class of teachers have been employed during the past three years, and under their training there is a very marked improvement in School matters. Formerly, penmanship and arithmetic were the only branches taught in these Schools, but with the introduction of a better system of teaching, we find a marked improvement in reading and other branches. In all the Schools, geography, history and English grammar are now taught. The history generally is British and Canadian. In the Township of Harvey, some of the difficulties attendant on newly settled townships exist, but, with one exception, the Schools are favourably conducted, and an earnest effort is made to maintain them. Douro is also keeping pace in School matters, with the progress of the County. Exception in Union Section No. 9, in which a new School-house is very much needed. The building now used as a School-house is unfit for occupation. I made an effort to get the people together to incite them to erect a new building, but they refused to do anything, lest the agitation should lead to a change of site. They cannot long remain as they are. I am glad to be able to report progress in School matters in this County generally, with the exception of a few sections labouring under disadvantages of position. Four years ago the standard of qualification for teachers was raised, and I am pleased to be able to report that the different Boards have worked cordially with me in endeavouring to maintain the position I then assumed. An attempt was made to establish a County Teachers' Association, but it was not as successful as its promoters could have desired. This was due, in part, to the size of the County, and the absence of remuneration to teachers to enable them to bear the extra expense of a few days at a Convention. I am persuaded that one week spent in Convention every year, where the most approved systems of teaching could be elucidated, and the different methods used in the County reduced to more uniformity, would do much for those teachers who have not the most favourable opportunities for self-training, or yet of attending any training institution. It would create a deeper interest in School matters, and in the work of their profession. There is a growing tendency to employ female teachers, because they can be obtained at lower salaries than male teachers can be. This is so, especially in the new townships. If this state of things continues, it will necessitate the same training for female teachers as for males, and the same standard in examination, and hence our training institutions should be prepared to take this into consideration. The "visiting" days allowed to teachers are

not always wisely spent. The necessity of reporting to the Local Superintendent on the state of the School visited, would tend to remedy the abuse of this wisely designed privilege. I am, however, persuaded, that if they were taken to visit the Schools, when the Superintendent would be present, that it would also tend to remove the abuse, and would perhaps otherwise do good to all concerned. The provisions of the new School Act will enable Inspectors to watch more closely the progress of our educational system. Ontario is highly favoured in having the best educational system on this continent, perhaps in the world, and, while some have blamed, many have praised your efforts and labours, and the course has been progressive. That Canada should be acknowledged as taking the lead in providing a good education for every child in the land, throws a halo of honour around the Chief Superintendent of Education, that future history shall brighten, notwithstanding the defects that some see in our youthful efforts and nation. Year after year will reveal the wisdom that designed our system, and with continued wise oversight, to detect and improve defects, Ontario shall be the leader for a long time to come in Common School education, if not also in affording the most liberal education for which a people could wish.

COUNTY OF PRINCE EDWARD.

G. D. Platt, Esquire, County of Prince Edward.—Perhaps the greatest cause of non-attendance is to be found in the inconvenience arising from distance. Our County is so irregularly shaped, with its numerous points and bays, that many School sections necessarily partake of the same irregularity of form. Besides this, in many cases the School-house is not situated in the centre of the section, thus greatly increasing the inconvenience of some. The grievance is very difficult to remedy. In addition, we have to complain, somewhat, of the usual causes of non-attendance on the part of those children living within reach of the School. Prizes were awarded in several Schools without any appreciable injury to the pupils. Where the amount appropriated to the purpose was less than five dollars, the books, &c., were procured of local dealers on very favourable terms. But, of course, the purchases from the Education Depository have invariably given the fullest satisfaction, both as respects quality and price. In several instances, I have witnessed the special commendations of trustees and teachers of the manner in which their orders had been filled by the Department. While on this point, I would like to add an instance shewing the importance of the services rendered the country by the Depository. Nearly two years ago, several Schools in this County were supplied by their trustees with a map, purporting to be that of the "United States Continent in 1900," prepared by Lloyd of New York, and sold at \$3.50. In less than a year after having been placed in the Schools, most of these maps were considerably defaced, and some completely riddled by pointer holes. With a glossy and highly-coloured surface, they were well calculated to please the eye; but without the usual cloth backs, they proved a very poor investment, to say nothing of the violence done to Canadian patriotism, by giving them a place in the Schools. I consider the Depository a most necessary institution, contributing in no small degree to the efficiency of our educational system. Several Schools have procured maps and apparatus during the year; but little, I regret to say, has been done in the way of libraries. A few sections have devoted to this purpose the proceeds of a series of penny readings held during the winter months. As regards the general condition of the Schools in this County during the past year, I think I am warranted in making a favourable report. In many respects there are cheering signs of progress. Good teachers are being better appreciated in many sections. The average salary of male teachers for the year is \$315, against \$295 in '69. Average for female teachers, \$177. Not only in selecting the best available teachers, but also in retaining them as long as possible, do many localities give evidence of the soundness of their views on education; yet, while a majority of our trustees are opposed to frequent changes, we still have too many who adhere to the old system of employing a male teacher during the winter, and a female in the summer. I need not say that this is sufficient to account for the backwardness and inefficiency of so many Schools. I trust the evil is being gradually remedied. Several new School-houses, nearly all of brick, and some of them of a very superior character, were built during the year. Many trustees display commendable

pride in the appearance and arrangement of their School-houses, and I have invariably observed that their erection has called for increased interest and zeal from the people of the respective localities. On the part of the teachers of this County, I have to report very gratifying advancement. Very few of them are contented to plod on in the old manner, unmindful of the great responsibilities of their profession, and careless of self-improvement. The existence of our flourishing Teachers' Association has awakened a desire for inquiry and progress in the minds of the teachers, as evinced by the attendance at the last session of the Normal School of no fewer than ten young men from Prince Edward. The teachers' professional library is also well appreciated and very useful. In addition, the association purchased a magic lantern with suitable views, at a cost of \$60, partly defrayed by pupils. During the past fall and winter, exhibitions were given in the different Schools throughout the County, and were occasions of considerable interest and instruction. I need hardly say that we still have some difficulties and discouragements confronting us as barriers in the path of progress; but, aided by the wise provisions of the School Act lately passed, and the general growth of intelligence and enterprise in our rising County, we ardently expect prosperity in the future.

COUNTY OF BRUCE.

Rev. John Ferguson, B. A., Bruce, Huron, &c.—The four townships under my superintendence are comparatively new—the erection of School-houses in most of the sections dating no further back than the years 1856 and '57. The newness and remoteness at this time of considerable portions of these townships, must be considered as affecting, to a very considerable extent, the progress of the Common Schools from year to year, as regards the efficiency of the teachers, the attendance of pupils, the character of the School buildings, and their equipment. For instance, in two of the townships a larger proportion appears of teachers holding certificates of a lower grade, poor School buildings, pupils attending the Schools without a proper and sufficient supply of school-books, than in the other townships belonging to this district. These deficiencies are not, however, I think, to be attributed to a greater lack of interest and zeal on the part of the settlers in these townships, in the benefit to be derived from the instruction given, in the Common Schools of the townships, or to any prejudices against the Schools, but to the comparative remoteness of parts of the townships, their newness, and the (at present) inability of the ratepayers to give higher salaries to the teachers, and to erect School-houses with suitable accommodations. In the reports of each of the Local Superintendents, a certain number appear representing those of School age, yet do not, from some cause or other, attend the Schools in their respective sections. I am, however, inclined to think that the actual number of children not in attendance upon any School is very small, and that such non-attendance, in but very few cases, proceeds from real indifference on the part of parents and guardians to the priceless benefits conferred by a good Common School education. In almost all cases, from actual observation, I believe that such non-attendance proceeds from drawbacks incidental to the newer parts of the country. In Bruce, Kinloss and Huron, but few of the railroads, along which the children living at the extreme ends of the section require to travel, have been opened up, and thus, at certain seasons of the year, the Schools are practically out of reach of a certain number of children of a School age in the section. In the township of Kincardine, this disadvantage in a considerable number of the sections has been got over by the adoption of what is called the line School system.

COUNTY OF KENT.

Edmund B. Harrison, Esquire, County of Kent.—I am sorry to report the destruction of three School-houses by fire. Two are supposed to be the work of incendiaries. Some of the Schools are very much crowded in consequence of an increase in the attendance of pupils. It is to be regretted that "adequate accommodation" is left to the discretion of trustees. Except in the Separate Schools no regular denominational instruction has been given in the Schools that I am aware of. Beyond opening and closing the School with the reading of the Scriptures and with prayer, the regulations in regard to religious

instruction are not observed. The only way in which religious instruction can be systematically given to the Common School children, must be through the medium of Sabbath Schools. More confidence is felt by trustees in procuring prize books from the Department. The examination papers of our County Board are printed. Copies of them are forwarded to show that the revised programme of studies is observed. A committee preparing these papers for the future will release the County Board from a very onerous duty, save time, make the teacher's office more permanent, and produce a higher standard and greater uniformity in the Common Schools.

COUNTY OF WELLINGTON.

A. D. Fordyce, Esquire, Amaranth.—There were a few Schools, as you will see, closed for one-half of the year, but only where, if not positive, there was some ostensible grounds made to appear for a practice, which is confessedly a bad one in more points of view than one. The salaries given to the teachers, I am glad to see, compare favourably with the preceding year, showing a rise in *seven* out of the ten townships under my charge. Some good changes were made in filling up the Schools—in other cases the reverse has been apparent. The Board of Public Instruction have been stricter, and the great number in the field when any situation is vacant shows the necessity; and there is far too great a desire to engage in the work, without that thoroughness in preparation for it, that is really essential to success. Some sections, I believe, will not allow their wretchedly poor School-houses to keep their ground much longer. A contract has been entered into for erecting a stone School-house in Section No. 3, Garafaxa West. In Section No. 8, Arthur, at the annual meeting, it was resolved to levy a certain sum towards the erection of a new School-house; and in Section No. 11, East Garafaxa, a new site has been procured, and previous obstacles have, I think, given way. These are three of the very worst, and during the last season, such another in Section No. 3, Arthur, has been replaced by a good brick building. In fact, the past year has, in this respect, been encouraging. During the past year, 26 of the teachers have availed themselves of the visiting days or part of them—six taking the whole during one or both of the half-years. In this way, 71 days really were, I have no doubt, used to good purpose by several teachers. Regarding text books, the new Canadian series of readers is almost universally employed now. In fact, the only exception I know of, is the old Fifth Book which is used for its lessons on Ancient History. Even in the Separate Schools, the new Canadian Series, is to be found along with the books of the Christian Brothers. There is an exceptional unauthorized Reader you may observe, called the “Metropolitan,” which has been introduced some years ago into a Separate School by the teacher. I shall insist on Smith and McMurphy's Arithmetic superseding Sangster's elementary at once; and, in the same way, Davies' taking the place of Lennie's Grammar, as the latter appears to be unauthorized now, although it is a point very hard to get generally understood. Collier's British History is working its way in, but I do not know that I am required to forbid the use of Edward's summary, where a more expensive work is unattainable. There are a few works used only by advanced scholars, which are unauthorized, such as Fulton and Eastman's Book-keeping, which it may not be altogether practicable to supersede at once; but I trust it will be unnecessary in any case to have recourse to the unpleasant alternative of withholding the share of the School Fund for disregard of instructions. I can only add that I am glad to find that more of our young teachers than in by-gone years are going to the Normal School, after having been engaged for a few years in small country Schools, and that, so far as this year's experience goes, there appears to be a greater desire to obtain teachers who have studied there.

DISTRICT OF ALGOMA.

Trustees of Wellington Mines.—You will observe that the total number of pupils attending the Schools during the year amounted to 229, being less by 57 than the attendance of 1869. This has been caused partly by the indifference towards education displayed by some of the parents and guardians. We are, however, happy to state that the progress made by the pupils in the various branches compares favourably with other

years. We have managed during the past year to pay off all the debt on the School. This prosperous state of affairs has been effected by private subscriptions, and the very liberal Government grant.

COUNTY OF ESSEX.

Théodule Girardot, Esquire, Sandwich.—There has been a visible improvement in the schools in this township during the past year. The teachers faithfully do their duty, and some schools are in a very prosperous condition. The free school system is adopted since many years all over the township. The cause of non-attendance may be attributed to indifference on the part of parents. Prizes have been distributed, with good result, in most of the schools. The general regulations, with regard to religious instruction, are followed. The revised programme for County Board Examinations is observed; the questions are printed and answered in writing; the standard of the candidates for certificates is very fair. The School No. 2 was not opened the first part of the year, on account of the building of a fine and substantial school-house, which is a great credit to that section. The schools, with but two or three exceptions, are provided with maps. In six schools, the pupils being French, that language is taught with the English.

James Bell, Esquire, Township of Colchester.—Two or three teachers within the last year, by earnest and well-directed labour, have brought up the schools under their charge to something better than the condition in which they found them at the beginning of the year. The teachers I refer to are females. I think, in this County at least, the work of school teaching is gradually tending to fall into the hands of females. I, for one, do not regret that this is the case. During nine years, I have found teaching in this township to be done fully as well by women as by men. The Provincial Board have conferred a rich boon in introducing the new reading books into the Common Schools. I was surprised to see a communication in one of the newspapers, containing the strange assertion that the new books were not equal to the old Irish series, because, forsooth! there is no subject treated in them systematically. Thanks to the growing intelligence of the age in educational matters, the time is nearly past for feeding the natural curiosity of children with the dry bones of the “—ologies.” A better idea is suggested by the heading of one of the columns of this report.

APPENDIX C.

CIRCULAR FROM THE CHIEF SUPERINTENDENT TO THE INSPECTORS OF PUBLIC SCHOOLS. IN THE PROVINCE OF ONTARIO.

EDUCATION OFFICE, TORONTO, 26th June, 1871.

SIR,—The School Act of 1871 has laid the foundation of a new era in the public school education of our country. This Act has remedied the most serious defects which experience had found in preceding School Acts; it has made the teaching of children and youth a PROFESSION, and confided to the highest class of public school teachers only the application of the school law and the oversight of the schools. It has made the schools entirely FREE in all the townships of the land; and it requires suitable school accommodation to be provided for all children of school age (that is, from 5 to 21 years), and secures to every child the right of, at least, four months' school instruction per annum from seven to twelve years of age inclusive. It enables County Councils to discharge their important duties much more efficiently and conveniently than heretofore, and gives a value and permanence to Teachers' Certificates of Qualifications which they never before possessed. It provides for a uniform and adequate standard of teachers' qualifications throughout the land, and requires the teaching of those subjects which are a requisite preparation for the agricultural, mechanical and manufacturing pursuits of the country. It provides, for the accomplishment of these objects by an agency which we have never yet had except in solitary instances, but without which no system of education can be made efficient; namely competent Inspectors of Schools, duly compensated.

2. Efforts have hitherto been directed to organize the machinery of the school system, and to provide the apparatus necessary to render it effective; and most nobly have the people of the country co-operated and done their part in bringing the whole system into efficient operation. But as long as the inspection of the schools was in the hands of men who were not paid or expected to devote their studies and time to the duties of their office, and who, for the most part, were not practical teachers, and who formed their standard of good schools and good teaching from what existed twenty or thirty years ago, and not from what the best schools have been made, and the improved methods of school organization, teaching and discipline which have been introduced during the present age, we could not expect any considerable improvement in the internal state and character of the schools, except from the improved character of the teachers and in instances where regularly trained teachers, or teachers who have kept pace with the progress of the times, have been employed; and even they have been able to do little in comparison of what they might have done, had their hands been strengthened and their hearts encouraged by the example, counsel and influence of thoroughly competent Inspectors.

3. It is but just and right, not to say patriotic, that the people should receive full value, in the practical character and efficiency of the public schools, in return for their sacrifices in establishing and maintaining the schools. I cannot, therefore, impress upon you too strongly the importance of your office, and the reasonable expectations of the country as to its usefulness. The law has prescribed your general duties; but the law has imposed upon me the duty of giving instructions as to the manner in which you should discharge your duties, and has enjoined upon each Inspector the observance of those instructions.

4. Your first duty will naturally be to make yourself familiar not only with the provisions of the School Law, but with the programme of studies and the regulations which the Council of Public Instruction have, after long and careful consideration, adopted to give effect to the new School Act, and which are sent herewith. They will be published in the JOURNAL OF EDUCATION for June.

5. In the programme of studies, the subjects essential to a good public school education are prescribed and classified, as also the number of hours per week of teaching each subject; but the mode or modes of teaching and illustrating the several subjects specified in order, is left to the independent exercise of the genius and talents of each teacher. In preparing this programme, the Reports of the latest Royal Commissioners in England on Popular Education, and the opinions of the most experienced educationists, have been consulted. It will be seen from the number and order of the subjects, and the time prescribed per week for teaching each of them, that the first years of common school studies are almost entirely devoted to teaching the three primary and fundamental subjects of a good education—reading, writing, and arithmetic, including only such other subjects and to such a degree, as to relieve the pupils from the tedium of the more severe and least attractive studies, and develop their faculties of observation and taste for knowledge, as suggested by the largest experience of the most advanced educators. The subjects of the programme are limited in both number and range to what is considered essential, and to what experience has proved can be thoroughly mastered by pupils of ordinary capacity and diligence within thirteen years of age. The thorough teaching of a few subjects, within practical limits, will do more for intellectual development, and for the purposes of practical life, than the skimming over a wide range of topics. The subjects of Natural Science required by the thirteenth section of the new School Act to be taught in the schools, and provided for in the programme, are such, and are prescribed to such an extent only, as is absolutely necessary for the advancement of the country,—in agriculture, in the mechanical arts, and manufactures, apart from science and literature. And when the cheap and excellent text-books prescribed are examined in connexion with the subjects specified, it will be found that nothing has been introduced which is impracticable, or for mere show, but everything for practical use, and that which admits of easy accomplishment.

6. The regulations specify not merely the duties of trustees, parents, teachers, and pupils in respect to the schools, but also the mode of visiting and inspecting them, which, I doubt not, will receive your careful and practical attention.

7. Your immediate duty, on entering into office, will be to receive the copies of official correspondence and all other official papers from your predecessor or predecessors in

office, as the eleventh clause of the ninety-first section of the Consolidated School Act requires each Local Superintendent, "on retiring from office to deliver over copies of his official correspondence and all such papers in his custody, to the order of the County Council." As the apportionments can not be made before the 1st of July, it will be *your* duty to make them, and to make them according to average attendance, authenticated as by the returns which may be placed in your hands, and according to the directions to Local Superintendents which are printed on the back of those returns. There may be delay in some instances arising from change of Inspectors of the Schools; but the inconvenience of such delay cannot occur again, and cannot extend over two or three weeks.

8. Your second, but most important, duty will be the Examination of Teachers for Certificates of Qualification.* Hitherto, each County Board has consisted of a considerable number of members, most of whom, and in some instances, all of whom, have had no experience as teachers; each Board has appointed the time as well as place of its own meeting, has prepared its own examination papers for three classes of teachers, and has then given certificates according to its discretion, both as to class and duration. Under the new Act, each Board of Examiners consists of not more than five members who have had experience in teaching, and is under the direction of the County Inspector, who must be a First Class Teacher of the highest grade; and the meeting of each Board is appointed to be held the same day in every county and city in the Province. The examination papers for three classes of teachers are all prepared, and the value of each question, and the time allowed for examinations in each subject, determined by a committee of practical teachers, under the sanction of the Council of Public Instruction,—that committee consisting, at present, of Professor Young (late Grammar School Inspector), and the two Inspectors of High Schools. The examination papers for each county will be sent under seal to the County Inspector, which seal is not to be broken except in the presence of the candidates for examination on the day and at the hour appointed. The merits of the answers to the questions for second and third class certificates will be decided upon by each County Board of Examiners; but the answers to the questions for first class certificates will be transmitted to the Education Department at Toronto, to be decided upon by the Council of Public Instruction, on the Report of its Committee of Examiners. Special instructions will accompany the examination papers; but I may here remark that what have heretofore been termed "*Third Class County Board Certificates*," are not permitted by the provisions of the new Act, and that what are called, and provided for under the new Act, as *Third Class Certificates*, are quite equal, if not above what have heretofore been called *Second Class County Board Certificates*. They are available for three years, and throughout the county in which they are granted. No new candidate for teaching can receive a higher than a third class certificate at his first examination, or before the expiration of three years from that time, unless on the special recommendation of the Inspector for his attainments, ability, and skill in teaching. No teacher is eligible to become a candidate for a second class certificate, who does not produce testimonials of having taught successfully three years; but he may be eligible at a shorter period after having received his third class certificate, on the special recommendation of the County Inspector.

9. Second-class certificates, under the new Act, it should be observed, are of much more value, and should be of a higher character, than first-class Board certificates under former Acts, as the latter was limited to a county; and could be cancelled at the pleasure of the Board that granted it; but the former is a life license (during good behaviour), and is available to every part of the Province. Each County Inspector, and the other members of each County Board of Examiners must, therefore, be impressed with the duty of not granting a second-class certificate to any candidate without satisfactory proof that he or she is a *successful* teacher of three years' standing (except in the case above specified), and a clear conviction in their own minds, that such candidate is qualified to teach all the subjects of the Public School Programme. This is required, not only by the patriotic spirit of the law, and conformity to the objects and principles of the school system, but as an act of common justice to every ratepayer in the Province. The schools are made *free by law*; and every man in the country is taxed according to his property to support the public schools; and every taxpayer has a corresponding right to have his children educa-

* Regulations for the examinations will be sent to you before the 25th of July.

ted in the public schools in all the subjects of the public school programme of studies; and he is deprived of this right if a teacher is employed who cannot teach his children these subjects, as far as required. Whether, therefore, you grant many or few second-class provincial certificates, I trust you and your co-examiners will give no such certificate as a personal favour, but simply upon the ground of ability to render the public educational service to the country which the law contemplates, and which every ratepayer has a right to demand.

10. Should the question arise as to a possible scarcity of public school teachers under the new law, I answer, as experience has shown in this and other analagous cases, that, however high your standard of qualifications may be, a sufficient number of candidates will work up to it,—when the value and dignity of the employment are proportionably raised. But two other answers may be given to the question. *First*,—Each County Inspector can grant a temporary certificate (as each Local Superintendent has heretofore done) in any case of necessity; but he should not grant such certificate except in case of necessity, and upon examination, nor unless satisfied that the applicant can teach all the subjects required in the school section for which (and for which alone) such certificate is granted. *Secondly*,—The existing certificates of qualifications held by teachers are valid according to their terms, and will therefore still be available to their holders should they fail to obtain certificates of qualification under the new law. And should a candidate for a Second-class Provincial Certificate fail to obtain one at the first examination, he will be eligible (as he has successfully taught a public school three years) to “try again” at the next ensuing half-yearly examination.

11. The examination of candidates for second and third-class certificates is also to be attended by candidates for first-class certificates, and will require some five days—six hours each day, from nine till twelve, and from two till five. As soon as the answers of candidates to the examination papers on the first subject shall have been collected, the Inspector can appoint a sub-committee of his colleagues to examine them, while the candidates, under another sub-committee of examiners, are preparing their answers to the papers on the other subjects, and so on throughout the days of examination; so that (as in the recent examination of candidates in Toronto, for certificates of qualification for County Inspectorships by a committee of the Council of Public Instruction) the County Board of Examiners may finish their work of examining the answers of candidates, and awarding certificates, within a short time after the candidates shall have finished their answers. It is, perhaps, hardly necessary to remark that no candidate should be allowed more than the prescribed time before returning the examination papers with such answers as he may have been able to prepare. And should a candidate for a second-class certificate fail to obtain one, he may be awarded a third-class certificate, if deserving it, or fall back upon his old County Board unexpired certificate, if possessor of one.

12. In regard to the additional examination of candidates for first-class certificates (which will commence on Tuesday, the 1st of August), it will not be necessary for the other members of the County Board to remain for that, as you only have to preside, and unseal and distribute the examination papers, and collect them with the answers of candidates, at the appointed times, and then transmit the whole to the Education Department at Toronto. But the regulations as to the eligibility of candidates you must carefully observe. You will remember that no teacher is eligible to be a candidate for a First-Class Provincial Certificate who has not obtained a Second-Class Provincial Certificate. For this regulation, there are two reasons. *First*,—The new Act does not authorize or permit the Council of Public Instruction to grant any other than First-Class certificates. The twelfth clause of the Act says, “First-Class certificates of qualification shall be awarded by the Council of Public Instruction *only*, and second and third-class certificates by County and City Boards of Examiners *only*.” If a candidate for a First-Class Provincial Certificate should fail to obtain it, the Council of Public Instruction has no power to award him a Second-Class Provincial Certificate. *Secondly*,—the examination for a Second-Class Certificate assumes that the candidate has passed the examination for a Second-Class Certificate, the same as admission into the Military School, and examination for a First-Class Certificate, must be preceded by admission for, and the obtaining of a Second-Class Certificate.

13. It is also requisite that a candidate furnish satisfactory proof of having successfully taught school five years, in order to be eligible for examination for a First-Class Certificate—a preliminary condition first recommended by the Ontario Teachers' Association. It would be unjust to trustees, parents and youths, that any man should be sent forth with the authority and prestige of a public license for life as a first-class teacher without his having given full proof not only of his knowledge of all the subjects of the programme required to be taught in the public schools, but of his ability and skill to teach them. The County Board Examiners have, of course, no means of ascertaining the candidate's aptitude and skill as a teacher, except from the testimony of his having taught successfully during five years. As an equivalent for this in the case of Normal School candidates, there is their course of training under the instruction of able masters in all the subjects of their examination—including a course of lectures on school organization and teaching, observing and practising teaching in the Model School,—on an average from two to five sessions. The severe and protracted course of exercises and practice in regard to school teaching alone, apart from those on other subjects, must impress every thinking person with the immense advantage, as well as great expenditure of time and labour, in a Normal School training for the profession of teaching, such as is required for the profession of law or medicine, or the apprenticeship required to become an architect or carpenter.*

* The extent and nature of the "Special Preparations for Duties of Teachers," required in the Normal course of instruction, may be judged of by the following extract from my last annual report on the subject:

"It has already been pointed out that every lecture given in the Normal School is given in such a manner that, making the necessary allowance for difference of age and attainments, it may serve as a *model* of the manner in which the teacher may treat the same subject before a class of children. In addition to this, however, the students-in-training receive a thorough course of lectures on the science and art of teaching, and they spend a portion of each week in the Model School, where, under the supervision of skilled teachers, they are required to take charge of the various classes, and conduct the lessons so as to give practical effect to the instructions received in the Normal School.

"The lectures on education in the Normal School embrace the following course:—

"I. Art of teaching; characteristics of the successful teacher; qualification, manners, habits, temper, tone of mind, &c., &c.

"II. Modes of securing co-operation of pupils; how to secure attention; how to interest the class.

"III. Intellectual teaching—in what it consists; how secured.

"IV. Mode of giving questions; kinds of questions; purposes served by each kind; characteristics of good style of questioning.

"V. Mode of receiving answers, and of criticising them; requirements by way of answering.

"VI. Correction of errors; recapitulations, &c.

"VII. How to teach—(a) reading; (b) spelling; (c) arithmetic; (d) grammar; (e) composition; (f) writing; (g) history; (h) geography; (i) geometry; (j) algebra; (k) philosophy; (l) object lessons; (m) other subjects.

"VIII. Organization of schools; classification of pupils; monitor teachers—their use and abuse; school buildings and arrangements; school furniture and apparatus, &c., &c.

"IX. School management; time tables and limit tables; school rules; school register; roll book visitors' book; school discipline; rewards and punishments.

"X. Principles of mental and moral philosophy, as far as applicable to the elementary school-room; mental, moral and physical culture of childhood.

"XI. General principles of education.

"The above course embraces in all about seventy lectures, of one hour each.

"The students in attendance are divided into classes of about nine each, under the superintendence of a *leader*, whose duty it is to get the lessons assigned to his class, and distribute them, the day before they are to be taught, among the members thereof, so as to give them time for preparation. The classes go alternately to the Model School, each spending a complete day there in rotation. The class on duty in the Model School is subdivided in three sections, of three each, and these are detailed to the several divisions of the Model School. Thus every student knows the night previously what division he is to be attached to the following day,—what lessons he has to teach, and their exact limits. He is exempted that evening from all work for the Normal School, and is held responsible for the thorough preparation of his work for the Model School. Moreover, as no student is required to teach any subject, the *method* of teaching which has not already been discussed in his hearing, in the Normal School, it follows that the teaching at the commencement of the session mainly falls to those members of the class who have already passed one or more complete sessions in the institution—the new comers for the time being merely looking on and familiarizing themselves with the working of the school; towards the close of the term, however, the teaching in the Model School is mainly confined to the new comers. The results of each lesson given are entered in the 'Model School Training Register,' one page of which is assigned to each student-in-training, under the following heads: Order, attention, interest, style, progress, preparation, fluency, manner, energy, accuracy, watchfulness, mode of giving questions, mode of receiving answers, correction of errors, power of giving explanation, thoroughness, effectiveness; and the numbers are entered in the appropriate columns by the Model School teachers, from one, implying great excellence, to six, representing complete failure. The Training Registers are sent to the Head Master of the Normal School once a month, and such *private* commendation or admonition is by him awarded to the students-in-training as each case seems to merit. *When the student indicates, by his course in the Model School, that he is not likely to make a useful teacher, he is recommended to withdraw.*

"To supplement these training exercises, the students are, as often as practicable, divided into sections

14. But I do not think there will be many candidates for First Class Certificates at this first examination. I think that as the programme of for First Class Certificates cannot be mastered without much application and study, and is, in some respects new, most of the candidates for First Class Certificates will come up for Second Class Certificates at this July examination, and prepare themselves for the examination for First Class Certificates the first part of next January.

15. *Inspection of Schools.*—After completing the examinations of candidates for Teachers' Certificates (of which blank forms will be sent to you to fill up and sign), your next work will be to visit and inspect the schools. I have not (as authorized by law) prepared and issued all needful instructions on this and other duties of County Inspectors. I have preferred the adoption of the accompanying regulations on the subject by the Council of Public Instruction; and I need do little more than direct your attention to these comprehensive and minute regulations. There are, however, two or three matters connected with your inspection of the schools on which I think it advisable to remark. You will probably find more or less of the schools very imperfectly, or not at all, organized for the advantage of either the teacher or pupils. A newly appointed Inspector,—a first class teacher—one who had been trained at the Normal School, told me the other day that the last school he taught, and which he ceased teaching the day before he conversed with me, was in such a state when he took charge of it, that he requested the trustees to be present on the first day of his assuming charge of the school, and to witness the examination of the pupils with a view to their classification. It was found that some pupils had read as far as the fifth reader, and yet could not do a question in simple subtraction, and knew little of the books they had read. It, therefore, became necessary to put pupils back from the fifth to the third reader, and make other changes in their relative positions—changes which were at first displeasing to some parents and pupils, but in making which he was sustained by the trustees. The result was that, in the course of three months, all parties gratefully acknowledged the surprising improvement in the school, and now deeply regretted his retirement from it. I dare say you will find the necessity of a similar re-organization of some, if not many, of the schools under your inspection; and your first work will be to see that all the pupils are classified according to the programme of studies, which divides them into six classes, the time per week of each subject is prescribed in the Time and Limit Table which accompanies the programme of studies. It will be seen by this programme, I repeat, that, in the first three classes or years of study, the attention and time of the pupils will be chiefly occupied with the three fundamental subjects of reading, writing and arithmetic, and that the other elementary subjects of these three classes or years, are intended to develop the faculties of observation, to improve the mechanical skill in the use of the pen and pencil, to relieve attention from drier and harder studies, and thus facilitate the progress of the pupils in the primary and essential subjects of public school education.

16. Much time and labour will be required in this your first inspection of the schools. It might be well on your first visit to devote one whole day to the inspection of each school, and where practicable be at the school-house five or ten minutes before the opening of the school to see how the teachers bring in and seat their pupils. You could devote the forenoon to observing the manner in which the teacher proceeds in teaching and managing the school; during which time you could form a tolerable idea of the ability, skill and merits of the teacher, and the condition of his school. You could then devote the afternoon to examining and teaching the school yourself; to the classification of the pupils, if necessary, and then privately give such advice, and make such suggestions to the teacher as you might think expedient. I think this course of proceeding may be advantageously pursued by Inspectors generally; and in this way the Inspector may, to a certain extent, where necessary, become a normal instructor and helper of teachers, as well as overseer

—each of which is taught in some assigned subject—by the members thereof in succession, in presence of the Master, of the Normal School. At the close of each lesson the students are required to criticise the manner in which it was taught, and offer suggestions for improvement thereon, &c.

“At the close of the session, the mark awarded for aptitude to teach is determined, partly by the Model School Report (the blank form is given above), partly by the success and energy with which each student conducts the class recitation in presence of the Masters of the Normal School, and partly by the general character for ability and energy he has earned for himself during the term.”

and organizer of the schools,—rendering them vastly more valuable to the country than they have ever been.

17. The regulations are sufficiently explicit as to the matters of attention and inquiry in your inspection of the schools, and I hope as therein directed, you will not omit to note in a book to be kept for the purpose, a brief statement of the condition in which you find the school, proceedings and qualifications of the teacher, the modes of teaching, classification and government of the school, school premises and accommodations, &c., &c., and transmit the same, or a copy of it, to the Education Department on your completing the visitation of the schools. This has been done, not only by every Inspector in England, but by the Inspectors of our Grammar Schools from the beginning. This report is not for publication, but to enable the Education Department to know precisely the condition, defects and wants of the schools, and to suggest and adopt, as far as possible, the requisite means for their improvement. It is also desirable to know the real condition and character of the schools at the commencement of the new system of inspection and of the free school law, that their future progress may be duly noted and appreciated.

18. The provisions of the law in regard to your duties in investigating and deciding on matters of complaint and many other things are too plain to require any particular explanations from me. This Department will always answer any inquiries you may have to make, and aid you in every possible way in the performance of the duties of your responsible office.

19. Having finished my life's work in respect of school legislation, I may not have occasion to address you another circular on the subject of the school law; but I shall watch with the deepest interest the operations and results of these recent and important improvements in our school system.

I have the honour to be, Sir,

Your faithful servant,

(Signed) E. RYERSON.

TO THE INSPECTOR OF PUBLIC SCHOOLS.

EXTRACTS FROM THE GENERAL REGULATIONS FOR THE ORGANIZATION, GOVERNMENT, AND DISCIPLINE OF THE PUBLIC SCHOOLS OF ONTARIO.

Prescribed by the Council of Public Instruction.

CHAPTER V.—DUTIES OF PUBLIC SCHOOL INSPECTORS.

[NOTE.—No Public School Inspector shall, during his incumbency, hold the office of Head Master of a High School, or Master or Teacher of a Public School.]

1. The School Law requires each Inspector of Public Schools,—

“*To act in accordance with the Regulations and instructions provided for his guidance.*” He is also “subject to all the obligations conferred or imposed by law * * * according to said instructions, as may be given to him from time to time by the Chief Superintendent of Education.” He is further required,—

“*To see that all the schools are managed and conducted according to law.*”

2 *County and City Inspectors' Full Time to be Employed.*—Each County and City Inspector shall devote the whole of his time during the ordinary office hours, to the duties of his office, except during the school holidays and vacations.

3. *The City and Town Inspectors* shall perform such duties as devolve upon them by the School Law and these Regulations, with such additional duties as may be required of them by the Public School Boards, which appoint them. They shall visit the schools as often as directed by the Board, and, in their visitations, shall be governed by the following regulations (so far as they apply to city or town schools):—See regulations 9, 10 and 19 in this chapter. They shall also keep one or more regular office hours in each day, as fixed, by the Board of Trustees, of which public notice shall be given.

4. *Visitation of Schools.*—The County Inspector shall visit every public and separate school under his jurisdiction at least once during each half year. He shall devote, on an average, half a day to the examination of the classes and pupils in each school, and shall record the result of such examination in a book to be kept for that purpose. (See regulation 6 of this chapter.) He shall also make enquiry and examination, in such manner as he shall think proper, into all matters affecting the condition and operations of the school, the results of which he shall record in a book, and transmit it, or a copy thereof, annually, on completing his second half-yearly inspection, to the Education Department; (but he shall not give any previous notice to the teacher or trustees of his visit.) The subjects of examination and inquiry shall be as follows:—

(a) *Mechanical Arrangements.*—The tenure of the property; the materials, dimensions and plan of the building; its condition; when erected; with what funds built; how lighted, warmed and ventilated; if any class rooms are provided for the separate instruction of part of the children; if there is a lobby, or closet, for hats, cloaks, bonnets, book-presses, &c.; how the desks and seats are arranged and constructed; what arrangements for the teacher; what play ground is provided,* what gymnastic apparatus (if any); whether there be a well, and proper conveniences for private purposes; and if the premises are fenced or open on the street or road; if shade trees and any shrubs or flowers are planted.

[NOTE.—In his inquiries into these matters, the Inspector is especially directed to see whether the law and regulations have been complied with in regard to the following matters; (should he discover remissness in any of them, he should at once call the attention of the trustees to it; before withholding the school fund from the section, with a view to its remedy before his next half-yearly visit):—

(1.) *Size of Section.*—As to the size of the school section, as prescribed by the fifteenth section of the School Law of 1871.

(2.) *School Accommodation.*—Whether the trustees have provided “adequate accommodation for all children of school age [i. e., between the ages of five and twenty-one years, resident] in their school division,” [i. e., school section, city, town, or village] as required by the second section of the School Act of 1871.

(3.) *Space for Air.*—Whether the required space of nine square feet for each pupil, and the average space for one hundred cubic feet of air for each child have been allowed in the construction of the school-house and its class rooms.† (See regulation 9, “Duties of Trustees.”)

(4.) *Well; Proper Conveniences.*—Whether a well or other means of procuring water is provided; also, whether there are proper conveniences for private purposes of both sexes on the premises; and whether the regulations in regard to them, contained in regulation 6 of the “Duties of Masters” and regulation 9 of the “Duties of Trustees,” are observed.

(b) *Means of Instruction.*—He shall see whether the authorized text books are used in the several classes, under the heads of Reading, Arithmetic, Geography, &c.; whether sufficient and suitable Apparatus are provided, as Tablets, Maps, Globes, Blackboards, Models, Cabinets, &c.

(c) *Organization.*—Arrangement of classes; whether each child is taught by the same

* *Size of School Grounds.*—The school grounds, wherever practicable, should in the rural sections embrace an acre in extent, and not less than half an acre, so as to allow the school-house to be set well back from the road, and furnish play-grounds within the fences. A convenient form for school grounds will be found to be an area of ten rods front by sixteen rods deep, with the school-house set back four or six rods from the road. The grounds should be strongly fenced, the yards and outhouses in the rear of the school-house being invariably separated by a high and tight board fence; the front grounds being planted with shade trees and shrubs. For a small school, an area of eight rods front by ten rods deep may be sufficient, the school-house being set back four rods from the front.

† *Ventilation* becomes easy as soon as it is known that it is embraced in these two essential operations, viz.: 1st, to supply fresh air; 2nd, to expel foul air. It is evident that fresh air cannot be crowded into a room unless the foul air is permitted to pass freely out; and certainly the foul air will not go out unless fresh air comes in to fill its place. It is useless to open ventilating flues when there is no means provided to admit a constant supply of fresh air from without.

Temperature.—In winter the temperature during the first school hour in the forenoon or afternoon, should not exceed 70°, nor 60° during the rest of the day.

teacher; if any assistant or assistants are employed; to what extent; how remunerated, and how qualified.

(d) *Discipline*.—Hours of attendance; usual ages of pupils; if the pupils change places in their several classes, or whether they are marked at each lesson, or exercise, according to their respective merits; if distinction depends on intellectual proficiency, or on a mixed estimate of intellectual proficiency and moral conduct, or on moral conduct only; what system of merit marks, or records of standing (if any) is used; whether corporal punishments are employed—if so, their nature, and whether inflicted publicly or privately; what other punishments are used (See regulations 3 and 4, "*Duties of Masters*," and 3, "*Duties of Assistant Teachers*"); whether attendance is regular; how many attend one month—how many two, three, or more months, &c.; is school opened and closed with reading and prayer, as provided in the regulations; whether the Ten Commandments are regularly taught, as required, and what separate religious instruction is given, if any.

(e) *Methods of Instruction*.—Whether simultaneous, or individual, or mixed; if simultaneous (that is, by classes), in what subjects of instruction; whether the simultaneous method is not more or less mingled with individual teaching, and on what subjects; to what extent the intellectual, or the mere rote method, is pursued, and on what subjects; how far the interrogative method only is used; how the attainments in the lessons are variously tested in the daily recitations and the quarterly examinations—by individual oral interrogation—by requiring written answers to written questions, or by requiring an abstract of the lesson to be written from memory.

(f) *Attainments of Pupils*.—1. In *Reading*; whether the higher pupils can read with ordinary facility only, or with ease and expression, as prescribed in the programme. 2. *Spelling*; whether they can spell correctly, and give the meaning and derivation of words. 3. *Writing*; whether they can write with ordinary correctness, or with ease and elegance. 4. *Drawing*; linear, ornamental, architectural, or geometrical; whether taught, and in what manner. 5. *Arithmetic*; whether acquainted with the simple rules, and skilful in them; whether acquainted with the tables of moneys, weights, measures, and skilful in them; whether acquainted with the compound rules, and skilful in them; whether acquainted with the higher rules, and skilful in them. 6. *Book-keeping*; how far taught. 7. *English Grammar*; whether acquainted with the rules of orthography, parts of speech, their nature and modifications, parsing. 8. *Composition*; whether acquainted with the grammatical structure of the language by frequent composition in writing, and the critical reading and analysis of the reading lessons in both prose and poetry. 9. *Geography and History*; whether taught as prescribed in the official programme, and by questions suggested by the nature of the subject. 10. *Christian Morals and Elements of Civil Government*; how far taught, and in what manner. 11. *Algebra and Geometry*; how many pupils, and how far advanced in; whether they are familiar with the definitions, and perfectly understand the reason, as well as practice, of each step in the process of solving each problem and demonstrating each proposition. 12. *Elements of Natural Philosophy, Chemistry, Agriculture and Natural History*, as prescribed in the programme; whether taught; what apparatus for teaching them; how many pupils in each. 13. *Vocal Music*; whether taught and in what manner. The order of questions is to be suggested by the nature of the subject. The extent and degree of minuteness with which the inspection will be prosecuted, in respect to any, or all of the foregoing, kindred subjects, must, of course, depend on circumstances.

(g) *Miscellaneous*.—1. How many pupils have been sent to the High School during the year. 2. Whether a visitors' book and register are kept, as required by law. 3. Whether the *Journal of Education* is regularly received by the trustees. 4. Whether the pupils have been examined before being admitted to the school, and arranged in classes, as prescribed by the regulations; and whether the required public examinations have been held. 5. What prizes or other means are offered to excite pupils to competition and study; and whether the merit system of cards issued by the Department is employed. 6. *Library*.—Is a library maintained in the section; number of volumes taken out during the year; are books covered and labelled as required; are books kept in library case; is catalogue kept for reference by applicants; are fines duly collected, and books kept in good order; are library regulations observed. 7. How far the course of studies and

method of discipline prescribed according to law, have been introduced, and are pursued in the school ; and such other information in regard to the condition of the schools as may be useful in promoting the interests of Public Schools generally.

5. *Authority of an Inspector in a School.*—The authority of an Inspector in a school, while visiting it, is supreme ; the Masters, Teachers and pupils, are subject to his direction ; and he shall examine the classes and pupils, and direct the Masters or Teachers to examine them, or to proceed with the usual exercises of the school, as he may think proper, in order that he may judge of the mode of teaching, management and discipline of the school, as well as of the progress and attainments of the pupils.

6. *Procedure in the Visitation of Schools.*—On entering a school, with a view to its inspection, and having courteously introduced himself to the teacher (if a stranger), or, if otherwise, having suitably addressed him, the Inspector shall :

(1.)—note in the Inspector's book, the time of his entrance, and on leaving, the time of departure from the school.

(2.)—see whether the business going on corresponds with that assigned to that particular hour on the time table, and generally whether the arrangements which it indicates agree with the prescribed programme of studies, and are really carried out in practice. If not, he should at once privately notify the Master or Teacher of the omission, and the penalty for neglect to observe the regulations.

(3.)—examine the register, and other school records, and take notes of the attendance of pupils, number of classes in the schools at the time of visit, &c.

(4.)—observe the mode of teaching, the management of the school, and generally its tone and spirit ; also whether the bearing, manner, and language of the teacher, his command over the pupils, and their deportment at the time of his visit are satisfactory.

7. *Intercourse with Teachers and Pupils.*—*Inspection.*—In his intercourse with Masters and Teachers, and during his visit to their schools, the Inspector should treat them with kindness and respect, counselling them privately on whatever he may deem defective or faulty in their manner of teaching ; but by no means should he address them authoritatively, or in a fault-finding spirit, in the presence or hearing of the pupils.

8. *See to Attendance of Children at School.*—The Inspector should see that the provisions in the third section of the School Act of 1871, in regard to the right of every child in the municipality under his jurisdiction to attend some school, are not allowed to remain a dead letter ; but he should, where necessary, frequently call attention to the subject.

9. *Teachers Visiting other Schools.*—County and City Inspectors shall have authority to allow teachers to visit schools, under the restrictions contained in regulation eight of the "*Additional Duties of Masters and Teachers.*"

10. *Payments to Teachers' Superannuation Fund.*—The forty-second section of the School Act of 1871, declares that "each Inspector of schools is hereby authorized and required to deduct [two dollars] half-yearly from any payments made by him to any male teacher under his jurisdiction, and transmit the same to the Education Department." As a City or Town Inspector under the new law possesses all the powers of a County Inspector, such City or Town Inspector will be required to perform the corresponding duty of the County Inspector, and sign or countersign with the chairman, or other officer of the board of trustees, all checks for the salaries of teachers. In doing so, he will have to see that the sum of two dollars, payable semi-annually to the Superannuated Teachers' Fund by each male teacher, is deducted from such teacher's half-yearly salary, and transmitted promptly, with the name of the teachers, and other information required, to the Education Department, in each January and July. This may be done in registered letters, or by deposit to the credit of the Chief Superintendent of Education, in any of the branches of the Bank of Montreal. In this latter case the deposit certificate should be transmitted, with the list of names, without delay, to the Education Department.

[NOTE.—If the Board of Trustees in cities and towns prefer it, they can direct the treasurer to deduct the full amount of the male teachers' half-yearly subscription in one sum from the salaries payable to such teachers, and transmit it, as above, through the Inspector (who is by law responsible for the performance of this duty) to the Department.]

11. *Granting Special Certificates.*—The School Law authorizes Inspectors “to give to any candidate, *on due examination*, according to the programme authorized for the examination of teachers, a certificate of qualification to teach school within the limits of the charge of the Inspector, until (but no longer than) the next ensuing meeting of the Board of Examiners of which such Inspector is a member; but no such certificate shall be given a second time, or be valid if given a second time, to the same person in the same county.” In giving effect to this provision of the Act, Inspectors will observe: (1) that they are required to examine all candidates desiring special certificates; (2) that they are not authorized to grant “permits,” or endorse as good any previous certificates of the applicant; (3) that the special certificates given can only have the value of those of the third class and be valid “within the limits of the charge of the Inspector;” (4) that under no circumstances can they give a special certificate to a teacher who has already previously received one from any (Local Superintendent or) Inspector in the same county; and (5) that no certificate can be given to any teacher who has been rejected by the Board of Examiners.

12. *Suspension of Certificates.*—When an Inspector finds it necessary to suspend the certificate of a Master or Teacher, he should not do so on the mere report of improper conduct, immorality or incompetency, but he should give the master or teacher due notice of the charge against him, and afford him a full opportunity for defence; and he should also examine carefully into the alleged facts of the case, and if necessary, visit the school and assure himself personally of their truth before proceeding to suspension.

[NOTE.—Officers required by law to exercise their judgments, are not answerable for mistakes in law, or mere errors in judgment, without any fraud or malice.]

13. *Blank Forms of Returns.*—Inspectors are responsible for obtaining reports from the Education Department, through the County Clerks, and supplying them to the Public Schools, and also for the prompt despatch of the blank forms of yearly and half-yearly returns directly to the trustees; and the trustees are equally responsible (in addition to the penalty imposed by law) for the delivery of the returns and reports to their Inspector, within ten days after the close of the year or half year.*

14. *Attendance of Pupils.*—The Inspector should see that the aggregate attendance of each school is correctly added up, and divided by the divisor for the half year, and that no lost time is made up by teaching on Saturdays, or other holidays, or vacations. (See note to regulation 4, of “*Terms, Hours of Teaching, etc.*”) Under regulation eight, of the “*Additional Duties of Masters and Teachers*,” teachers may employ certain days in the year in visiting other schools. In order that the school may not lose a corresponding proportion of the School Fund, the Inspector is authorized to add a proportionate amount of average attendance for time so employed, or by using a smaller divisor. After having examined and tested the correctness of the return, the Inspector should file away and carefully preserve it, so that it may be handed over, with other school documents, to his successor, when he retires from office.

15. *Check against Incorrect Returns.*—The half-yearly return of the pupils’ names, and number of days on which they attended during each month, will be a check against false or exaggerated returns; as the Inspector can, in his visit to any school, take the return with him, compare it with the school register, and make any further enquiries he may deem necessary. He should also, at his visits to the schools, take notes in his book of the school attendance, &c. The return, carefully compiled, will furnish materials for the statistical tables in the Inspector’s report, and will show at what periods of the year the attendance of pupils at the schools is the largest, and how many attend school two, four, six, &c., months of the year.

16. *Apportionment to Schools.*—The returns of the trustees’ half-yearly reports must form the basis for apportioning the School Fund to the several public schools of each township. The Legislative Grant forms the School Fund for the first half year, and the Municipal Assessment the School Fund for the second half year. The Inspector is required to apportion each half year’s School Fund to every section, whether in operation

* DEPARTMENTAL NOTE.—The School Law does not require the Education Department to furnish Registers or blank forms to the trustees, but for the convenience of all parties concerned, it has done so gratuitously.

or not, for that half year. In making the apportionment, the attendance of non-resident* pupils (authorized by the one hundred and twenty-sixth section of the Consolidated School Act,) is to be reckoned as belonging to the section in which they are actual residents, and not to the section in which they may attend school. See regulation 15 of "*Duties of Trustees*."

17. *No Omission in Apportioning*.—The Inspector is required to make an apportionment of the School Fund to all the Public Schools under his jurisdiction, whether entitled to it or not; but he should not give an order to pay any portion of the fund to a section the trustees and teacher of which have not complied with the requirements of the law and regulations. (See sections two and clause six of section thirty of the School Act of 1871, and note to (a) of regulation 4, as well as of regulation 19 of this chapter). All forfeited balances are to be disposed of as directed by the one hundred and sixth section of the Consolidated School Act, sub-section eight.

18. *Union School Sections*.—(See the ninety-second and ninety-third sections of the Consolidated School Law, the eighteenth section of the School Act of 1871, and regulation 18 of *Duties of Trustees*.)

19. *Cheques to Teachers*.—Any cheques for school money due a section, must be made payable to the (qualified) teacher or his order, and to no other person; (see ninety-first section of the Consolidated School Act, sub-section two;) and no cheque can be given to such teacher except on an order signed by a majority of the trustees of the school section, and attested by a lawful corporate seal, and then only for the time during which the teacher has held a legal certificate of qualification, not cancelled, suspended, recalled or expired. (See clause four of section thirty of the School Act of 1871.) In giving cheques to male teachers the half-yearly payment of two dollars to the Superannuated Teachers' Fund must be deducted. (See regulation 10 and 25 of this chapter.)

20. *Authorized Text Books required*.—Inspectors should see that the law and regulations on the subject of text books are carried out. The Act declares that Inspectors are required "to prevent the use of unauthorized text books," and schools using them are not entitled to be paid any part of the fund; and the Council has given notice that it "disapproves of the use, in any High or Public School, of any text book which is not included in the list of text books authorized by it, as provided by law."

21. *The Inspector as Umpire, and ex-officio Examiner*.—The law virtually makes Inspectors umpires in all arbitrations relating to school sites, and differences of opinions between auditors in regard to school section accounts. It also authorizes them to call the meetings of Reeves and Inspectors, for the formation or alteration of union school sections, and requires them to transmit to the County Clerk information of all such changes as they may make in the boundaries of school sections. It further authorizes them to settle all local school disputes, school elections, &c., subject to an appeal to the Education Department against their decision. The Inspectors are also members of the Board of Examiners for the examination of teachers, also for the admission of pupils to the High Schools.

22. The Inspector shall act as Chairman of the Board of Examiners, and shall perform such other duties as are prescribed for him in the *Powers and Duties of Public School Examiners*; and the Inspector shall notify the Education Department, at least two weeks before the half-yearly examination, of the number of copies of the examination papers which will be required for his county.

23. *School Meetings and Elections*.—The law requires County Inspectors "to decide upon any complaints which may be made [within twenty days], in regard to the election of [rural] school trustees, or in regard to any proceedings at school meetings." The law declares that the decision must be either "to confirm" or "set aside" the election or pro-

* *Non-resident pupils* are those whose parents or guardians are not residents of the section or school division. Such pupils do not become residents by boarding in the section or division while attending school, until the expiration of a year. (This rule does not apply to apprentices, or to parties who move into the section with a view to become *bona fide* residents.) A ratepayer in a section or division employing temporarily a minor (whose parents or guardians reside outside of the section, &c.), cannot lawfully report such minor in the school census, nor claim to send him as a resident unless he is duly apprenticed to such ratepayer. Adopted children and orphans, having guardians, who are *bona fide* residents, and other children who are *bona fide* residents of the school section or division, not having parents or guardians shall not be admitted until the guardian, adopted parent, friend or person with whom they reside, shall furnish the trustees with satisfactory evidence of such adoption, guardianship or *bona fide* residence.

ceeding (subject to an appeal to the Chief Superintendent), and not to dismiss the complaint, or refuse to entertain it. If the proceedings be set aside, a reasonable time should be allowed to permit the parties concerned to appeal before calling another meeting, or otherwise carrying out the decision of the Inspector. The decision should be given as soon as possible, but not necessarily within the twenty days. A reasonable time may be taken by the Inspector to investigate the complaint, and, if he desires it, to apply to the Chief Superintendent for advice on any doubtful point.

24. *Decide Cases, and give Counsel and Advice.*—The Inspector should promptly adjudicate upon all cases submitted to him, after hearing both sides, and give such counsel and advice (in harmony with the School Law and Regulations) as shall, in his judgment, best promote the interests of the schools, and prevent disputes and litigation in the various neighbourhoods.*

25. *Conditions of Payment of Inspector's Salary.*—The proportion of each County Inspector's salary, payable by the Government, will be certified quarterly to the Provincial Treasurer by the Chief Superintendent, on the following conditions;—

(1) That the name and address of the Inspector appointed by the County Council has been duly certified to the Education Department by the County Clerk.

(2) That such Inspector possesses a legal certificate of qualification from the Education Department.

(3) That he has faithfully performed the duties of his office during the time specified in regulation two of this chapter, and in the manner prescribed by the law and regulations.

(4) That he has promptly transmitted half-yearly to the Education Department, with the names of the Teachers, (to be afterwards certified from his cheques by the County Auditors at the end of each year), the semi-annual subscriptions to the Superannuated Teachers' Fund by the male teachers under his jurisdiction.

(5) That the required reports and returns have been duly sent in to the Education Department, and found to be correct (including his annual special report on each school, as provided for in regulation five of this chapter).

[NOTE.—Each Public or Separate School house in use for a school, in a legally established (or duly recognized) school section or division, within the jurisdiction of the Inspector, shall be counted as one school, (whether such school be in actual operation, or temporarily closed for not longer than six months). And each department of a school, with a register of its own, and taught in separate rooms, or a flat of a building, so as to involve the additional oversight and examination of an ordinary school on the part of an Inspector at his official visits, shall also be counted as one school; but a school with one or more departments, when closed, shall only be regarded as one school for the time limited above, beyond which time no school which is closed shall be counted.]

APPENDIX D.

TEXT BOOKS FOR USE IN THE PUBLIC SCHOOLS OF ONTARIO.

AUTHORIZED BY THE COUNCIL OF PUBLIC INSTRUCTION.

NOTE.—In the following list, some books are *prescribed*, and others are *recommended*. The use of the books *recommended* is discretionary with the respective Public School Boards.

I. ENGLISH.

TEXT BOOKS PRESCRIBED :

The Canadian National Series of Reading Books. (Authorized edition.)

The Spelling Book, A Companion to the Readers. (Authorized edition.)

* A public officer who is required by law to act in certain cases, according to his judgment or opinion, and subject to penalties for his neglect, is not liable to a party for an omission arising from a mistake or want of skill, if acting in *good faith*.

Miller's Analytical and Practical English Grammar. (Authorized edition.)

An English Grammar for Junior Classes. By the Rev. H. W. Davies, D.D. (Authorized edition.)

A History of English Literature, in a series of Biographical Sketches. By William Francis Collier, LL.D.

II, ARITHMETIC AND MATHEMATICS.

TEXT BOOKS PRESCRIBED :

Advanced Arithmetic for Canadian Schools. By Barnard Smith, M.A., and Archibald McMurphy, M.A. (Authorized edition.)

Elementary Arithmetic for Canadian Schools. By the Rev. Barnard Smith, M.A., and Archibald McMurphy, M.A. (Authorized edition.)

Elements of Algebra. Todhunter's or Sangster's.

Euclid's Elements of Geometry. Potts' or Todhunter's.

III. GEOGRAPHY AND HISTORY.

TEXT BOOKS PRESCRIBED :

Lovell's General Geography. By J. George Hodgins, LL.D., Barrister-at-law. (Authorized edition.)

Easy Lessons in General Geography. By ditto. (Authorized edition.)

A School History of the British Empire. By William Francis Collier, LL.D.

A History of Canada and of the other British Provinces of North America. By J. George Hodgins, LL.D., Barrister-at-Law.

Outlines of General History. By William Francis Collier, LL.D.

TEXT BOOK RECOMMENDED .

The Great Events of History. By William Francis Collier, LL.D.

IV. PHYSICAL SCIENCE.

TEXT BOOKS PRESCRIBED : (See note above.)

Rudimentary Mechanics. By Charles Tomlinson. Portions relative to the mechanical powers.

The Animal Kingdom. By Ellis A. Davidson.

How Plants Grow : A simple Introduction to Botany, with Popular Flora. By Asa Gray, M.D.

V. MISCELLANEOUS.

TEXT BOOKS PRESCRIBED :

First Lessons in Agriculture. By Rev. Dr. Ryerson.

Our Bodies*. By Ellis A. Davidson.

Easy Lessons on Reasoning. By Archbishop Whately.

TEXT BOOKS RECOMMENDED : (See note above.)

A Comprehensive System of Book-keeping, by Single and Double Entry. By Thomas R. Johnson. A work on Book-keeping is to be sanctioned.

Field Exercise and Evolutions of Infantry. Published by authority. Pocket edition (for Squad and Company Drill).

The Modern Gymnast. By Charles Spencer.

A Manual of Vocal Music. By John Hullah.

* The following little works are also highly recommended for perusal, both by teachers and pupils, viz:—
 "The House I live in," by T. C. Girtin, Surgeon (Longmans), and "Our Earthly House and its Builder" (Religious Tract Society). Cutter's "First Book on Anatomy, Physiology and Hygiene, for Grammar Schools and Families," is the prescribed book for High Schools, and may be used in the Public Schools if desired.

- Three Part Songs. By H. F. Sefton. (Authorized edition.)
 National Mensuration.
 Scripture Lessons—Old and New Testaments. (National.)
 Lessons on the Truth of Christianity. (National.)
 Right Lines in their Right Places. By Ellis A. Davidson.
 Teachers' Guide, and Bartholomew's Primary School Drawing Cards. By Miss J. H. Stickney.
 The Drawing Book for the Dominion of Canada, in progressive Studies, seven numbers.
 William Hermes' Drawing Instructor. For advanced studies.
 Writing Copy Books, used in the Normal and Model Schools for Ontario. In Five Parts.

VI. FRENCH AND GERMAN SCHOOLS.

The following Books, approved by the whole Committee of the Council of Public Instruction for Quebec, are also sanctioned for use by French pupils, in Public Schools of this Province in which there are both Protestant and Roman Catholic pupils :

- Cours d'Arithmétique Commerciale. (Senécal, Montreal.)
 Abrégé de la Géographie Moderne. (Société d'Education de Quebec.)
 La Géographie Moderne, de M. Holmes, M.A.
 Grammaire pratique de la langue Anglaise. (Par P. Saddler, Paris.)
 Traité Elementaire d'Arithmetique. (Par F. X. Toussaint.)
 Le Premier Livre de l'Enfance, (de Poitevin.)
 Cours de Versions Anglaises. (Par P. Saddler, Paris.)
 Grammaire Française Elementaire. (Par F. B. P.)
 For German Schools, Klotz's German Grammar is sanctioned.

APPENDIX E.

TEXT BOOKS FOR USE IN THE HIGH SCHOOLS OF ONTARIO

(AUTHORIZED BY THE COUNCIL OF PUBLIC INSTRUCTION.)

NOTE.—In the following list some books are *prescribed* under the authority of the fifteenth section of the Consolidated High School Act, and others are *recommended*. The use of the books *recommended* is discretionary with the respective High School Boards. The Council has decided that the books on English subjects authorized for High Schools may also be used in the Public Schools.

I. LATIN.

TEXT BOOKS PRESCRIBED :

Harkness's New Series, viz:

1. An Introductory Latin Book. By Albert Harkness, Ph. D.
2. A Latin Reader, intended as a Companion to the Author's Latin Grammar. By Albert Harkness, Ph. D.
3. A Latin Grammar for Schools and Colleges. By Albert Harkness, Ph. D.

If preferred, the following may be used instead of the above series :

Arnold's First and Second Latin Books and Practical Grammar, revised and corrected. By J. A. Spencer, D.D., or

Dr. Smith's Principia Latina. Part I. Revised by H. Drisler, LL.D.

A Smaller Grammar of the Latin Language. By William Smith, LL.D.

LATIN DICTIONARY RECOMMENDED : (See note above.)

A Latin-English and English-Latin Dictionary. By Charles Anthon, LL.D., or

The Young Scholar's Latin-English and English-Latin Dictionary. By Joseph Esmond Riddle, M.A.

II, GREEK.

TEXT BOOKS PRESCRIBED :

A First Greek Book, comprising an outline of Grammar and an Introductory Reader. By Albert Harkness, Ph. D., *or*

Dr. Smith's *Initia Græca*.

A smaller Grammar of the Greek Language, abridged from the larger Grammar of Dr. George Curtius.

GREEK LEXICON RECOMMENDED : (See note above.)

Liddell and Scott's Greek-English Lexicon.

III. ANCIENT HISTORY, CLASSICAL GEOGRAPHY, AND ANTIQUITIES.

TEXT BOOKS PRESCRIBED :

A Manual of Ancient History. By Dr. Leonhard Schmitz.

First Steps in Classical Geography. By Prof. James Pillans.

CLASSICAL DICTIONARIES, &c., RECOMMENDED : (See note above.)

A Classical Dictionary of Biography, Mythology and Geography. By Wm. Smith, LL.D.

A Dictionary of Greek and Roman Antiquities. By William Smith, LL.D., *or*

A Classical Dictionary. By Charles Anthon, LL.D.

A Manual of Roman Antiquities. By Charles Anthon, LL.D.

A Manual of Greek Antiquities. By Charles Anthon, LL.D.

IV. FRENCH AND GERMAN.

TEXT BOOKS PRESCRIBED :

Text Books in French and German will be prescribed.

History of Charles XII. of Sweden. By Voltaire.

Horace : A Tragedy. By Corneille.

A Complete Dictionary of the French and English Languages. By Gabriel Surenne. Spiers' New Abridged Edition.

V. ENGLISH.

TEXT BOOKS PRESCRIBED :

The Canadian National Series of Reading Books. (Authorized edition.)

The Spelling Book, A Companion to the Readers. (Authorized edition.)

Miller's Analytical and Practical English Grammar. (Authorized edition.)

A History of English Literature, in a Series of Biographical Sketches. By William Francis Collier, LL.D.

VI. ARITHMETIC AND MATHEMATICS.

TEXT BOOKS PRESCRIBED :

Advanced Arithmetic for Canadian Schools. By the Rev. Barnard Smith, M.A., and Archibald McMurchy, M.A. (Authorized edition.)

Elementary Arithmetic for Canadian Schools. By the Rev. Barnard Smith, M.A., and Archibald McMurchy, M.A. (Authorized edition.)

Elements of Algebra. Todhunter's or Sangster's.

Euclid's Elements of Geography. Potts' or Todhunter's.

VII. MODERN GEOGRAPHY AND HISTORY.

TEXT BOOKS PRESCRIBED :

Lovell's General Geography. By J. George Hodgins, LL.D., Barrister-at-law. (Authorized edition.)

A School History of the British Empire. By William Francis Collier, LL.D.

A History of Canada, and of the other British Provinces of North America. By J. George Hodgins, LL.D., Barrister-at-law.

Outlines of General History. By William Francis Collier, LL.D.

TEXT BOOK RECOMMENDED :

The Great Events of History. By William Francis Collier, LL.D.

VIII. PHYSICAL SCIENCE.

TEXT BOOKS PRESCRIBED : (See note above.)

Rudimentary Mechanics, by Charles Tomlinson, with Cassell's Hand-book of Natural and Experimental Philosophy, *or*

Manual of Mechanics, by the Rev. Samuel Houghton, M.A., F.R.S., with Introductory Course of Natural Philosophy. Edited from Ganot's Popular Physics, by W. G. Peck, M.A.

The Animal Kingdom. By Ellis A. Davidson.

How Plants Grow : A Simple Introduction to Botany, with Popular Flora. By A. A. Gray, M.D.

Lessons in Elementary Chemistry. By Henry E. Roscoe, B.A., L.R.S.

IX. MISCELLANEOUS.

TEXT BOOKS PRESCRIBED :

First Lessons in Agriculture. By Rev. Dr. Ryerson.

First Book on Anatomy, Physiology, and Hygiene, for Private Schools and Families.

By Calvin Cutter, M.D., *or* (for Public Schools.)

Our Bodies. By Ellis A. Donaldson,*

Easy Lessons on Reasoning. By Archbishop Whately.

TEXT BOOKS RECOMMENDED : (See note above.)

A Comprehensive System of Book-keeping, by Single and Double Entry. By Thos. R. Johnson. A work on Book-keeping is to be sanctioned.

Field Exercise and Evolutions of Infantry. Published by Authority. Pocket edition (for Squad and Company Drill).

The Modern Gymnast. By Charles Spencer.

A Manual of Vocal Music. By John Hullah.

Three Part Songs. By H. F. Sefton. (Authorized edition.)

National Mensuration.

Scripture Lessons—Old and New Testaments. (National.)

Lessons on the Truth of Christianity. (National.)

Right Lines in their Right Places. By Ellis A. Davidson.

Linear Drawing, by Ellis A. Davidson.

Teachers' Guide, and Bartholomew's Primary School Drawing Cards. By Miss J. H. Stickney.

The Drawing Book for the Dominion of Canada, in progressive Studies, seven numbers.

William Hermes' Drawing Instructor. For advanced students.

Writing Copy Books, used in the Normal and Model Schools for Ontario. In Five Parts.

* The following little works are also highly recommended for perusal both by teachers and pupils, viz:—"The House I live in," by T. C. Girtin, Surgeon (Longmans), and "Our Earthly House and its Builder." (Religious Tract Society.) "Our Bodies," by Ellis A. Davidson, is the prescribed book for Public Schools, and may be used in the High Schools if desired.

APPENDIX F.—Summary of Apportionment to Counties, Cities, Towns,
and Villages.—*Continued*

VILLAGES— <i>Con.</i>	Public Schools.	R. C. Separate Schools.	Total.	VILLAGES— <i>Con.</i>	Public Schools.	R. C. Separate Schools.	Total.
	\$ cts.	\$ cts.	\$ cts.		\$ cts.	\$ cts.	\$ cts.
Iroquois	72 00		72 00	Port Colborne....	62 00	38 00	100 00
Kemptville.....	129 00		129 00	Port Dalhousie..	125 00		125 00
Kincardine.....	183 00		183 00	Preston.....	119 00	24 00	143 00
Lanark	82 00		82 00	Renfrew	61 00		61 00
Listowel	129 00		129 00	Richmond	54 00		54 00
Merrickville.....	107 00		107 00	Seaforth.....	143 00		143 00
Mitchell	193 00		193 00	Smith's Falls....	86 00	27 00	113 00
Morrisburgh.	125 00		125 00	Southampton....	97 00		97 00
Mount Forest.....	132 00	15 00	147 00	Stirling	82 00		82 00
Newburgh.....	95 00		95 00	Strathroy.....	183 00		183 00
Newcastle.....	80 00		80 00	Streetsville.....	72 00		72 00
New Edinburgh....	50 00		50 00	Thorold	146 00	61 00	207 00
New Hamburg.....	118 00		118 00	Trenton	124 00	90 00	214 00
Newmarket.....	128 00	40 00	168 00	Vienna	86 00		86 00
Oil Springs.....	132 00		132 00	Wardsville.....	72 00		72 00
Orangeville.....	90 00		90 00	Waterloo.....	171 00		171 00
Orillia.....	136 00		136 00	Welland	114 00		114 00
Oshawa.....	202 00	79 00	281 00	Wellington.....	54 00		54 00
Pembroke.....	45 00	45 00	90 00	Yorkville.....	183 00		183 00
Petrolia.....	154 00		154 00		7353 00	495 00	7848 00
Portsmouth.....	85 00	40 00	125 00				
GRAND TOTALS.							
Counties and Districts,.....					142276 00	2801 00	145077 00
Cities,					7757 00	3365 00	11122 00
Towns,					10486 00	2214 00	12700 00
Villages,					7353 00	495 00	7848 00
					167872 00	8875 00	176747 00

APPENDIX G.—Apportionment of the Grammar School Fund for the year 1871.

GRAMMAR SCHOOL.	COUNTY.	Average Attendance first half of 1870.	Apportionment, at the rate of \$8 per pupil.	Average Attendance last half of 1870.	Apportionment, at the rate of \$8 per pupil.
			\$ cts.		\$ cts.
Arnprior	Renfrew	20	160 00	17	136 00
Barrie	Simcoe	37	296 00	35	280 00
Beamsville	Lincoln	13	104 00	17	136 00
Belleville	Hastings	49	392 00	48	384 00
Berlin	Waterloo	26	208 00	20	160 00
Bowmanville	Durham	53	424 00	44	352 00
Bradford	Simcoe	18	144 00	18	144 00
Brampton	Peel	32	256 00	50	400 00
Brantford	Brant	30	240 00	23	184 00
Brighton	Northumberland	20	160 00	24	192 00
Brockville	Leeds	22	176 00	46	368 00
Caledonia	Haldimand	28	224 00	14	112 00
Carleton Place	Lanark	14	112 00	14	112 00
Cayuga	Haldimand	17	136 00	25	200 00
Chatham	Kent	35	280 00	27	216 00
Clinton	Huron	27	216 00	25	200 00
Cobourg	Northumberland	74	592 00	61	488 00
Colborne	do	56	448 00	49	392 00
Collingwood	Simcoe	24	192 00	19	152 00
Cornwall	Stormont	20	160 00	28	224 00
Drummondville	Welland	34	272 00	29	232 00
Dundas	Wentworth	71	568 00	71	568 00
Dunnville	Haldimand	39	312 00	29	232 00
Flora	Wellington	18	144 00	14	112 00
Farmersville	Leeds	41	328 00	25	200 00
Fergus	Wellington	14	112 00	11	88 00
Fonthill	Welland	42	336 00	45	360 00
Galt	Waterloo	104	832 00	104	832 00
Gananoque	Leeds	22	176 00	25	200 00
Goderich	Huron	31	248 00	37	296 00
Grimsby	Lincoln	31	248 00	23	184 00
Guelph	Wellington	36	288 00	42	336 00
Hamilton	City	101	808 00	99	792 00
Ingersoll	Oxford	28	224 00		
Iroquois	Dundas	52	416 00	38	304 00
Kemptville	Grenville	29	232 00	21	168 00
Kincardine	Bruce	19	152 00	22	176 00
Kingston	City	76	608 00	71	568 00
Lindsay	Victoria	31	248 00	34	272 00
London	City	36	288 00	38	304 00
L'Orignal	Prescott	24	192 00	20	160 00
Manilla	Ontario	33	264 00	25	200 00
Markham	York	35	280 00	26	208 00
Metcalfe	Carleton	12	96 00	12	96 00
Milton	Halton	13	104 00	15	120 00
Morrisburgh	Dundas	20	160 00	32	256 00
Mount Pleasant	Brant	25	200 00	22	176 00
Napanee	Lennox	62	496 00	61	488 00
Newburgh	Addington	34	272 00	60	480 00
Newcastle	Durham	38	304 00	29	232 00
Newmarket	York	26	208 00	19	152 00
Niagara	Lincoln	21	168 00	15	120 00
Norwood	Peterborough	30	240 00	33	264 00
Oakville	Halton	11	88 00	21	168 00
Oakwood	Victoria	18	144 00	14	112 00
Onemee	do	51	408 00	41	328 00
Orangeville	Wellington	20	160 00	23	184 00
Osborne	Russell	13	104 00	13	104 00
Oshawa	Ontario	67	536 00	49	392 00
Ottawa	City	70	560 00	53	424 00
Owen Sound	Grey	37	296 00	35	280 00

APPENDIX G.—Apportionment of the Grammar School Fund—*Continued.*

GRAMMAR SCHOOL.	COUNTY.	Average Attendance first half of 1870.	Apportionment, at the rate of \$8 per pupil.	Average Attendance last half of 1870.	Apportionment, at the rate of \$8 per pupil.
			\$ cts.		\$ cts.
Pakenham	Lanark	19	152 00	9	72 00
Paris	Brant	41	328 00	31	248 00
Pembroke	Renfrew	20	160 00	16	128 00
Perth	Lanark	60	480 00	56	448 00
Peterborough	Peterborough	101	808 00	96	768 00
Pictou	Prince Edward	25	200 00	39	312 00
Port Dover	Norfolk	17	136 00	13	104 00
Port Hope	Durham	56	448 00	53	424 00
Port Perry	Ontario	37	296 00	30	240 00
Port Rowan	Norfolk	27	216 00	21	168 00
Prescott	Grenville	40	320 00	29	232 00
Renfrew	Renfrew	21	168 00	18	144 00
Richmond	Carleton	13	104 00	20	160 00
Richmond Hill	York	31	248 00	29	232 00
Sarnia	Lambton	18	144 00	17	136 00
Scotland	Brant	21	168 00	21	168 00
Simcoe	Norfolk	44	352 00	44	352 00
Smith's Falls	Lanark	30	240 00	23	224 00
Smithville	Lincoln	22	176 00	21	168 00
Stirling	Hastings	18	144 00	8	64 00
Stratford	Perth	33	264 00	26	208 00
Strathroy	Middlesex	25	200 00	18	144 00
Streetsville	Peel	33	264 00	24	192 00
St. Catharines	Lincoln	73	584 00	64	512 00
St. Mary's	Perth	33	264 00	23	184 00
St. Thomas	Elgin	15	120 00	34	272 00
Thorold	Welland	36	288 00	46	368 00
Toronto	City	69	552 00	78	624 00
Trenton	Hastings	29	232 00	13	104 00
Uxbridge	Ontario	42	336 00	42	336 00
Vankleekhill	Prescott	28	224 00	26	208 00
Vienna	Elgin	26	208 00	32	256 00
Wardsville	Middlesex	34	272 00	15	120 00
Waterdown	Wentworth	20	160 00	13	104 00
Welland	Welland	19	152 00	16	128 00
Weston	York	35	280 00	41	328 00
Whitby	Ontario	82	656 00	70	560 00
Williamstown	Glengarry	27	216 00	30	240 00
Windsor	Essex	34	272 00	36	288 00
Woodstock	Oxford	36	288 00	46	368 00

APPENDIX H.

THE NORMAL SCHOOL FOR ONTARIO.

PROVINCIAL CERTIFICATES GRANTED BY THE CHIEF SUPERINTENDENT OF EDUCATION.

The Chief Superintendent of Education, on the recommendation of the Masters of the Normal School, and under the authority of the following section of the Consolidated Common School Act for Ontario, has granted to the undermentioned Students of the Normal School, Provincial Certificates of Qualification as Common School Teachers in any part of this Province.

"107. The Chief Superintendent of Education, on the recommendation of the Teachers of the Normal School, may give to any Teacher of Common Schools a Certificate of Qualification, which shall be valid in any part of [Ontario] until revoked; but no such certificate shall be given to any person who has not been a student in the Normal School."

The Certificates are divided into Classes, in harmony with the general programme, according to which all teachers in this Province are required to be examined and classified, and are valid until revoked, or until the expiration of the time mentioned in the Certificate, according to the following form:—

GRADE A, (B OR C), OF THE FIRST (OR SECOND) CLASS.

Certificate of Qualification—Normal School, for Ontario.

THIS IS TO CERTIFY, that _____ having attended the Normal School during the _____ Session, 18—, and having been carefully examined in the several branches named in the margin, is hereby recommended to the Chief Superintendent of Education, as eligible to receive a First (or Second) Class Certificate of Qualification, as a Common School Teacher in Ontario, according to the "Programme of the Examination and Classification of Common School Teachers," revised by the Council of Public Instruction, on the 17th day of December, 1858.

Head Master.

Second Master

[L.S.] IN ACCORDANCE with the foregoing recommendation, and under the authority vested in the Chief Superintendent of Education by the 107th section of the Ontario Consolidated Common School Act (22nd Victoria, chapter 64),

STANDING.

IN THE DIFFERENT BRANCHES—
No. 1 being the highest and 6 the lowest.

Reading.....	.....
Spelling.....	.....
Writing.....	.....
Arithmetic.....	.....
Grammar.....	.....
Composition.....	.....
Education.....	.....
Aptitude to Teach.....	.....
Geography.....	.....
History.....	.....
Algebra.....	.....
Geometry.....	.....
Mensuration.....	.....
Natural Philosophy.....	.....
Chemical Physics.....	.....
Chemistry.....	.....
School Law.....	.....
English Literature.....	.....
Drawing.....	.....
Music.....	.....
Book-Keeping.....	.....
Punctuality and Regularity.....	.....
Conduct.....	.....

I do hereby grant to _____ a First (or Second) Class Certificate of Qualification, as a Common School Teacher, of the grade and standing above indicated, which certificate shall be valid in any part of Ontario, until revoked by this Department (or for one year, as in the case of Second Class Certificates, Grade C).

Dated at the Education Office, Toronto, this (fifteenth) day of
one thousand eight hundred and seventy

Chief Superintendent of Education for Ontario.

Recorded in Certificate Register A of
the Department, Number

Registrar.

Prior to the Ninth Session, no Provincial Certificates were issued. The Head Master certified to the attendance and conduct of the pupils, but such certificates do not qualify the holders to become teachers in the Common Schools.

During the Ninth and Tenth Sessions, three classes of Certificates were granted, the First, Second, and Third; but the Third-Class Certificates of the Ninth Session expired on 1st July, 1854, and those of the Tenth Session on the 1st November, 1854.

From the Eleventh to the Fourteenth Session, inclusive, only First and Second-Class Certificates were granted, and were not divided into Grades.

From the Fifteenth Session to the present time, the Certificates granted have been of the First and Second-Class, but each Class has been further divided into three Grades, A, B and C. These certificates are all valid until revoked, but since the Nineteenth Session, inclusive, all Certificates of the Second-Class, Grade C, have been granted for one year only, so that the only valid certificates of that grade are those granted from the Fifteenth to the Eighteenth Sessions, and those dated June and December, 1867, which expired in June and December, 1868.

In the Appendix to the Annual Report of 1867, pages 77-91, a full list of all certificates valid on 31st December of that year, was printed. The following is the list of certificates granted in 1870 :—

FORTY-THIRD SESSION.—DATED 15th JUNE, 1870.

MALES.

First Class.—Grade B.

- 2937. Crews, Lewis Warner.
- 2938. Eastman, Samuel Henry.
- 2939. Mackintosh, William.
- 2940. Payne, Edw. (2748, 2832.)
- 2941. Scilly, Samuel Thomas.

First Class.—Grade C.

- 2942. Briggs, Addison Arnold.
- 2943. Chaisgreen, Charles, (1069.)
- 2944. Clendenning, William Scott (2227.)
- 2945. Hendry, Andrew, (2329.)
- 2946. Langford, Charles James.
- 2947. Langrell, Edward Pierce Hopkins.
- 2948. McIlvaine, Samuel, (2570.)
- 2949. Minaker, William.
- 2950. Stuart, Farquhar McRae.

Second Class.—Grade A.

- 2951. Bean, David.
- 2952. Steel, Andrew Cheeseman.

First Class.—Grade A.

- 2974. Moulo, Fannie Barbara. (2804, 2895.)

First Class.—Grade B.

- 2975. Adams, Annie, (2897.)
- 2976. Harvey, Ellen, (2763.)
- 2977. Philips, Mary Louisa.

First Class.—Grade C.

- 2978. Croley, Mary Frances.
- 2979. Cruise, Jane Ann, (2923.)

Second Class.—Grade B.

- 2953. Ballard, John Francis, (2871.)
- 2954. Bigger, Charles Albert.
- 2955. Currie, Dugald.
- 2956. Gray, William.
- 2957. McCamus, John Armstrong.
- 2958. McGladry, William.
- 2959. McGowan, Thomas Manson Kinney.
- 2960. McKay, Murdoch.
- 2961. McKee, George, (2647.)
- 2962. McKillop, Charles.
- 2963. Purves, William.
- 2964. Rosebrugh, Melvin Moe.

Second Class.—Grade C.

- 2965. Anson, James.
- 2966. Bowerman, Cornelius.
- 2967. Crawford, William Henry.
- 2968. Cummings, William Richardson.
- 2969. Hall, Henry Walter.
- 2970. Morton, Alfred Clarence.
- 2971. Sheppard, Daniel Erastus.
- 2972. Smith, Sylvester.
- 2973. Wellwood, Richard.

FEMALES.

- 2980. Donovan, Mary, (2908.)
- 2981. Fullerton, Eleanor.
- 2982. Hagarty, Kate.
- 2983. Horton, Rachel.
- 2984. Johnston, Sarah, (2801, 2909.)
- 2985. Joyce, Mary Greeves, (2688, 2910.)
- 2986. McGinty, Winifred Unity.
- 2987. McKenna, Teresa Maria, (2911.)
- 2988. Munshaw, Matilda Caroline, (2710, 2904.)
- 2989. Nixon, Jennie, (2817, 2905.)
- 2990. Ramsay, Annie, (2931.)
- 2991. Richardson, Caroline Amanda, (2933.)
- 2992. Robinson, Alfaretta, (2916.)

FEMALES—Continued.

2993. Stokes, Georgina, (2808, 2918.)

Second Class—Grade A.

2994. Bailey, Emma Charlotte.

2995. Berry, Jane.

2996. Craddock, Agnes.

2997. Riddel, Sarah Jane, (2932.)

2998. McKenzie, Susan, (2815.)

Second Class—Grade B.

2999. Addison, Ellen.

3000. Allan, Kate Morrison.

3001. Atkinson, Harriet Emma, (2920.)

3002. Campbell, Elizabeth.

3003. Cody, Caroline Sabrina, (2922.)

3004. Dingman, Margaret Mahala, (1993.)

3005. Dunlop Elizabeth.

3006. Frisby, Adah.

3007. Grabell, Ladonia Maria Emmeline, (1701.)

3008. McCoy, Susanna.

3009. Meneilly, Julia Isabella.

3010. Mulholland, Sarah.

3011. Munro, Janet.

3012. Murison, Annie, (2929.)

3013. Neilson, Isabella Helen.

3014. Robertson, Jane, (2935.)

3015. Shaw, Mary.

3016. Stewart, Margaret.

3017. Thompson, Emily Clara.

3018. Twohey, Eleanor Teresa.

3019. Williamson, Eliza Moneta Leavens.

3020. Wilson, Eliza, (2919.)

3021. Zeigler, Lydia Ann.

3022. Campbell, Elizabeth, (the 2nd.)

3023. Campbell, Jessie.

3024. Crawford, Margaret.

3025. Hawley, Charlotte Cordelia.

3026. Henry, Mary Jane.

3027. Kennedy, Alice Smart.

3028. Kennedy, Emma.

3029. McDonald, Mary Ann.

3030. McIntosh, Isabella.

3031. McPherson, Hughena Eugenie.

3032. Metcalfe, Janet.

3033. Moffat, Eliza.

3034. Rich, Catherine.

3035. Rowe, Mary Ann.

3036. Thompson, Jane.

3037. Woods, Maria.

3038. Yorke, Lucinda Elma.

3039. Zeigler, Lizzie.

FORTY-FOURTH SESSION—DATED 22nd DECEMBER, 1870.

MALES.

First Class—Grade A.

3040. Clendenning, William Scott, (2227, 2944.)

3041. McDowall, Joseph William, (2626.)

3042. Mackintosh, William, (2939.)

3043. Wilson, John, (2630, 1833.)

First Class—Grade B.

3044. Bergey, David, (2721.)

3045. Chaisgreen, Charles, (1069, 2943.)

3046. Deacon, John Scott, (2849.)

3047. McIlvaine, Samuel, (2570, 2948.)

3048. Sheppard, Daniel Erastus, (2971.)

First Class—Grade C.

3049. Carey, Robert.

3050. Doupe, William, (2565.)

3051. McCamus, John Armstrong, (2957.)

3052. McCardell, David, (2864.)

3053. Powell, George Kinson.

3054. Purves, William, (2963.)

3055. Rosebrugh, Melvin Moe, (2964.)

Second Class—Grade A.

3056. Chapman, William Francis.

3057. Emerson, Samuel.

3058. Gray, William, (2956.)

3059. Kerr, George Jonathan, (2873.)

3060. McNeil, Frank.

3061. Ovens, Thomas.

3062. Shoff, Elgin.

3063. Smith, Sylvester, (2972.)

3064. Stalker, John.

Second Class—Grade B.

3065. Bolton, John.

3066. Braithwaite, William.

3067. Carey, Dominic Hugh.

3068. Clark, William.

3069. Cruise, George.

3070. Hall, Henry Walter, (2969.)

3071. Harrison, James Murrel.

3072. Madge Walter.

3073. McKibbin, Archibald.

3074. Scott, Edward.

3075. Wittet, George.

Second Class—Grade C.

3076. Comrie, Peter.

3077. Girardot, Ernest Joseph.

3078. Jameson, Hugh Alfred.

3079. Neilly, William.

3080. Nethercott, Samuel.

3081. Smith, Robert Henry.

3082. Wilson, Jasper.

FEMALES.

First Class—Grade A.

3083. Adams, Annie, (2897, 2975.)

First Class—Grade B.

3084. Berry, Jane, (2995.)
 3085. Croley, Frances Mary, (2978.)
 3086. Donovan Mary, (2903, 2980.)
 3087. Johnston, Sarah, (2801, 2909, 2984.)
 3088. McCoy, Susanna, (3008.)
 3089. McGinty, Winifred Unity, (2986.)
 3090. McKenna, Teresa Maria, (2911, 2987.)
 3091. Stewart, Margaret, (3016.)

First Class—Grade C.

3092. Addison, Ellen, (2999.)
 3093. Bailey, Emma Charlotte, (2994.)
 3094. Campbell, Elizabeth, (3002.)
 3095. Cummings, Louisa Ellen, (2810, 2898.)
 3096. Dingman, Margaret Mahala, (1993, 3004.)
 3097. Gray, Caroline Martha.
 3098. Hawley, Charlotte Cordelia, (3025.)
 3099. McLaughlin, Mary.
 3100. Meneilly, Julia Isabella, (3009.)
 3101. Rowe, Mary Ann, (3035.)
 3102. Shaw, Mary, (3015.)
 3103. Thompson, Emily Clara, (3017.)
 3104. Williamson, Eliza Moneta Leavens, (3019.)

Second Class—Grade A.

3105. Allan, Kate Morrison, (3000.)
 3106. Burkholder, Hannah Dena.
 3107. Clark, Jessie Agnes, (2682.)
 3108. Crawford, Margaret, (3024.)
 3109. Frisby, Adah, (3006.)
 3110. Meehan, Mary Matilda Aloysia.
 3111. Moffat, Eliza, (3033.)
 3112. Moore, Lizzie.
 3113. Neilson, Isabella Helen, (3013.)

Certified.

EDUCATION OFFICE,
 Toronto, January, 1871.

3114. Thompson, Jane, (3036.)
 3115. Woods, Maria, (3037.)

Second Class—Grade B.

3116. Abbott, Mary Caroline.
 3117. Barber, Mary.
 3118. Campbell, Maggie Helen.
 3119. Chambers, Annie Catherine, (2809.)
 3120. Farrow, Harriet Amelia.
 3121. Henry, Mary Jane, (3026.)
 3122. Johnston, Phoebe Jane.
 3123. Kennedy, Emma, (3028.)
 3124. Lavin, Armina.
 3125. Lennon, Bridget Mary.
 3126. Metcalfe, Janet, (3032.)
 3127. Miller, Harriet.
 3128. Moran, Ahcia, (2709.)
 3129. McCammon, Kate.
 3130. McCaully, Mary Jane.
 3131. McKay, Sarah Elizabeth.
 3132. Ray, Agnes, (2818.)
 3133. Richards, Drusilla.
 3134. Ross, Jennie.
 3135. Rowell, Ada Matilda.
 3136. Spafford, Alice Adelia.
 3137. Zeigler, Lizzie, (3039.)

Second Class—Grade C.

3138. Boyle, Kate.
 3139. Clarke, Anna Mary.
 3140. Hudson, Lucy Maria.
 3141. Hume, Annie.
 3142. Jackson, Margaret.
 3143. McCaully, Ellen.
 3144. McIntosh, Isabella, (3030.)
 3145. Newell, Maria Elizabeth.
 3146. O'Brien, Kate Stanislaus.
 3147. Pettey, Selenia.
 3148. Purkiss, Irene Elizabeth.
 3149. Scott, Jane Chrystalle.
 3150. Waugh, Fanny Racey.

ALEXANDER MARLING,
 Registrar.

APPENDIX I.

THE EDUCATIONAL MUSEUM FOR ONTARIO.

1. *Rules for the Admission of Visitors to the Educational Museum, Toronto.*

I. The Museum is open daily for Exhibition, Sundays and Holidays excepted, from 9 a.m. until 5 p.m.

II. All persons are freely admitted, upon registering their names in the Visitors' Book at the Education Office.

III. Sticks and umbrellas to be left below stairs.

2. Character and objects of the Museum.

1. This Educational Museum is founded after the example of what is being done by the Imperial Government as a part of the system of popular education—regarding the indirect as scarcely secondary to the direct means of training the minds, and forming the taste and character, of the people. It consists of a collection of school apparatus for Common and Grammar Schools, of models of Agricultural and other implements, of specimens of the Natural History of the Country, casts of Antique and Modern Statues and Busts, &c., selected from the principal Museums of Europe, including busts of some of the most celebrated characters in English and French History; also copies of some of the works of the great Masters of the Dutch, Flemish, Spanish, and especially of the Italian Schools of Painting. These objects of Art are *labelled*, for the information of those who are not familiar with the originals, and a descriptive historical catalogue of them can be purchased at the Museum. In the evidence given before the Select Committee of the British House of Commons, it is justly stated that, “the object of a National Gallery is to improve the public taste, and to afford a more refined description of enjoyment to the mass of the people;” and the opinion is at the same time strongly expressed, that as “people of taste going to Italy constantly bring home beautiful modern copies of beautiful originals,” it is desirable, even in England, that those who have not the opportunity or means for travelling abroad should be enabled to see, in the form of an accurate copy, some of the celebrated works of Raffaele and other great masters; an object no less desirable in Canada than in England. What has been thus far done in this branch of public instruction is in part the result of a small annual sum, which, by the liberality of the Legislature, has been placed at the disposal of the Chief Superintendent of Education, out of the Ontario share of the School Grants, for the purpose of improving school architecture and appliances, and to promote arts, science, and literature by means of models, objects and publications, collected in a museum in connection with this department.

3. Principal Contents of the Museum.

2. The Museum contains a large selection of objects of art, models, &c., arranged under the following heads, as detailed in the Reports of 1856 and 1857, pages 246 and 106:—

I. SCULPTURE:

1. Greek and Roman Antiques.
2. Modern French and English.
3. Assyrian.
4. Egyptian.
5. Architectural.

III. ENGRAVINGS:

1. On Steel and Copper.
2. Lithographs.
3. Chromo-Lithographs.

II PAINTINGS:

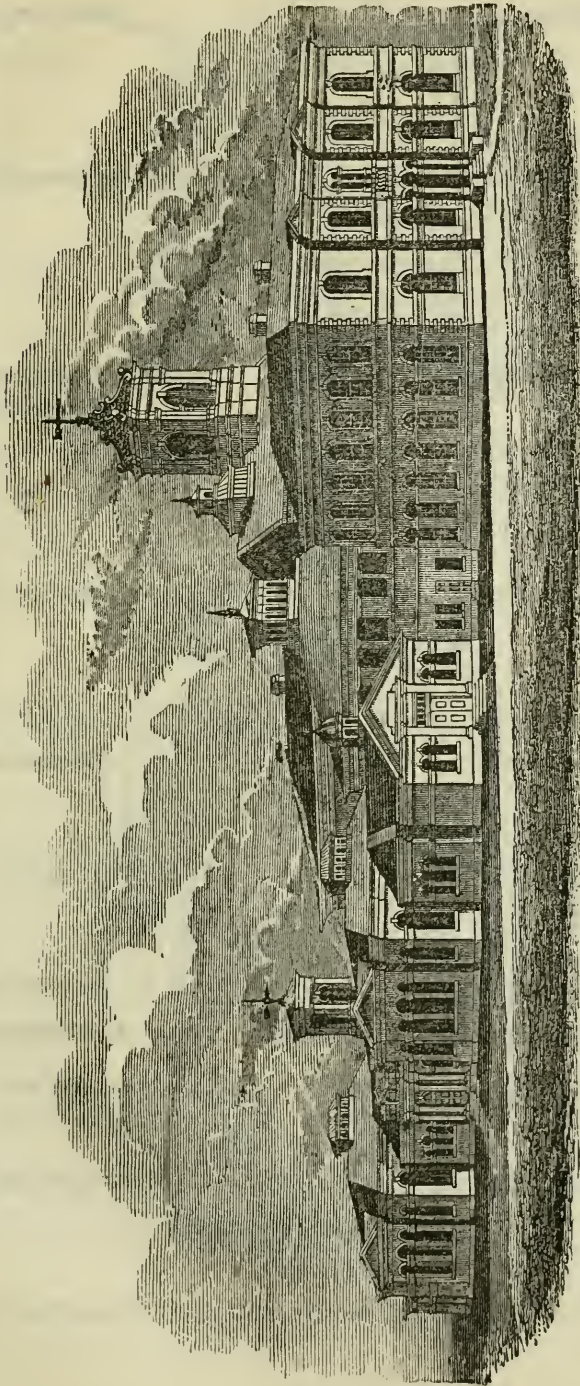
1. Italian School.
2. Flemish School.
3. Dutch School.
4. Miscellaneous Dutch and Flemish.
5. German School.
6. French School.
7. Spanish School.

IV. WORKS ILLUSTRATING THE HISTORY OF ART &C.

1. In French and Italian.
2. In English.

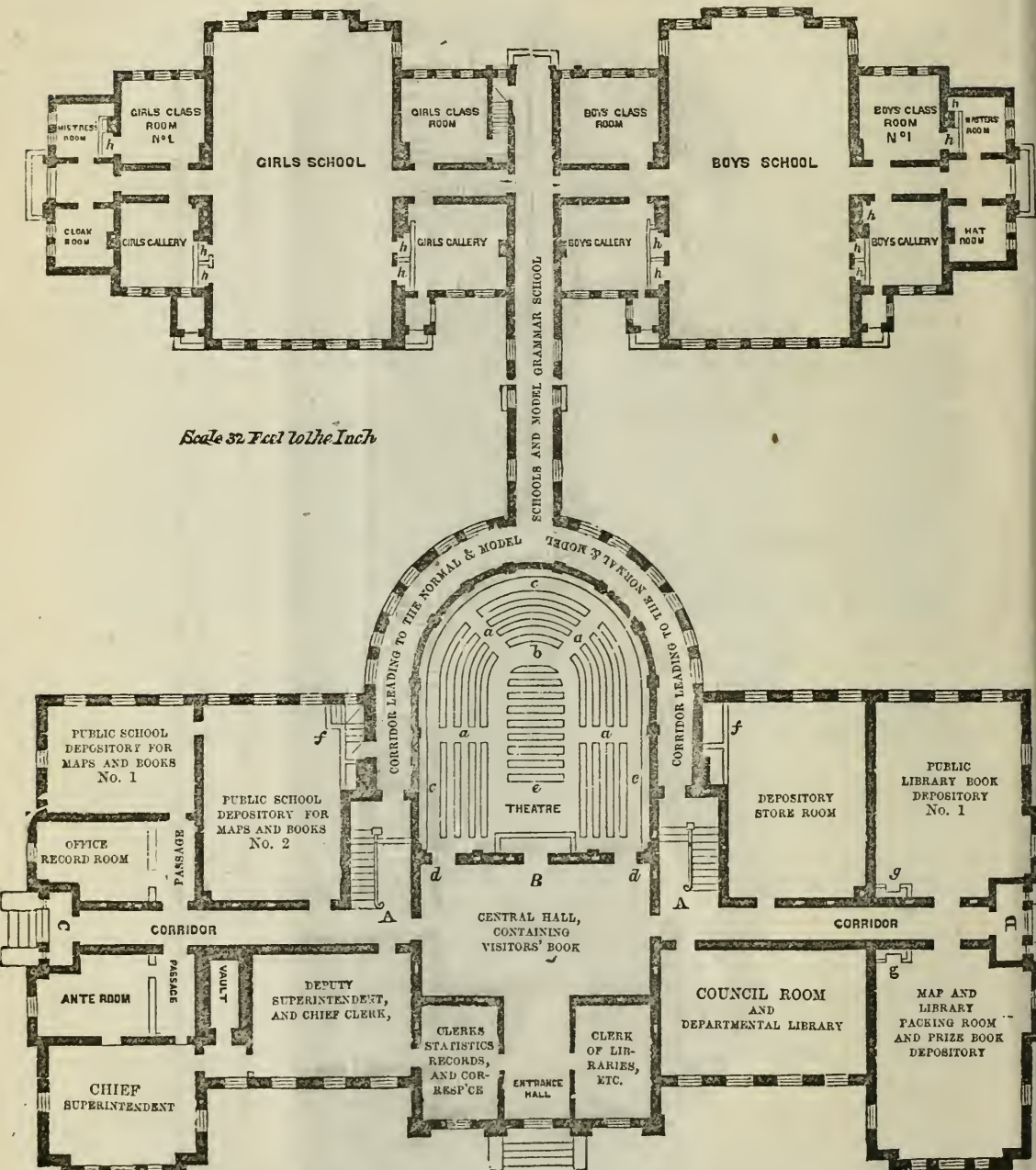
V. OTHER OBJECTS OF INTEREST:

1. Illustrations of Mediæval History, Figures in Armour, Weapons, &c.
2. Maps and Plans in Relief.
3. Specimens of Natural History.
4. Geological Specimens.
5. Models of Agricultural Implements.
6. Philosophical Models and School Apparatus.
7. Photographs, Copies of Porcelain and Rock Crystal Ware, Decorative Plate, Bronzes, &c., &c.

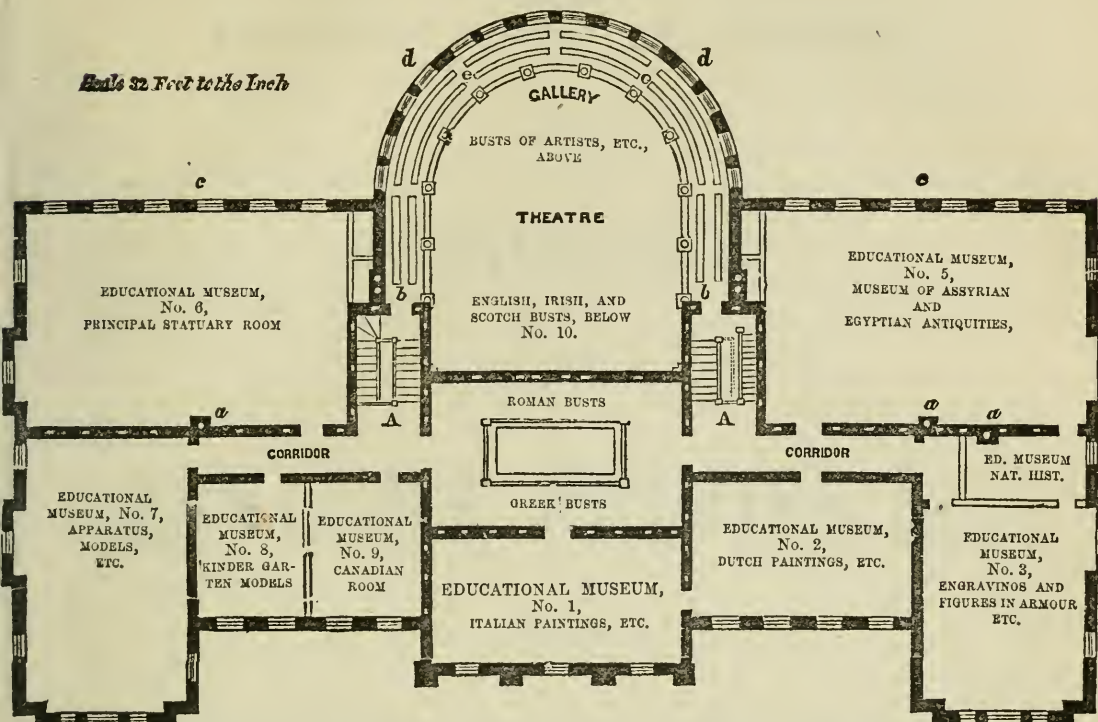


DEPARTMENT OF PUBLIC INSTRUCTION FOR ONTARIO, VICTORIA SQUARE.

The Education Offices are on the First Floor to the left; the Museum Rooms up Stairs; the Normal School (not shown) is in a new building in the rear, facing Gerrard Street, and the Model Schools between the Education Offices and the Normal Schools.



PLAN OF THE GROUND FLOOR OF THE EDUCATION DEPARTMENT.—No. 1.



PLAN OF EDUCATIONAL MUSEUM—FIRST FLOOR OF THE EDUCATION DEPARTMENT.—No. 2.

[Key to References on Plan No. 1.—North of the central hall is the theatre, with the lecturer's entrance in the centre, *B*; and side entrances, east and west, *d, d*, for the public. Here the aisles are marked *a, b, c*, with seats arranged between them; the lecturer's platform being placed between *B* and *c*. This portion of the theatre is designed to accommodate 470 persons, and the galleries 150, making in all 620. Around the theatre, and beneath its gallery, are east and west corridors leading to the Model Schools, and the Normal School in the new building in the rear, facing Gerrard Street. *A, A*, staircases leading to the first floor; *C* and *D*, west and east entrances to the Department and the Depository; *f f* and *g g* are ventilators leading from the different rooms to the cupola at the top of the building, where they are discharged.]

[Key to References on Plan No. 2.—*A, A*, lobbies at the head of the principal staircases leading to the east and west corridors respectively—off which are the rooms of the Museum; *a, a, a*, ventilators connecting with those from below; *b, b*, doors on the first landing, leading to the east and west galleries of the theatre; *c, c*, northern tier of windows of the principal statuary room and School of Art; *d, d*, northern tier of windows of theatre gallery; *e, e*, aisles and seats of the gallery.]

FOURTH ANNUAL REPORT

OF THE

INSPECTOR

OF

ASYLUMS, PRISONS, &c.,

FOR THE

PROVINCE OF ONTARIO,

1870-71.

Printed by Order of the Legislative Assembly.



Toronto:

PRINTED BY HUNTER, ROSE & CO., 86 & 88 KING ST. WEST.

1871.

CONTENTS.

	PAGE
Preface.....	1
General Report on Prisons.....	3
Report on Central Prison.....	15
Prison Statistics for 1870-71.....	21
SEPARATE REPORTS ON THE STATE AND MANAGEMENT OF COUNTY GAOLS :—	
Barrie Gaol	27
Brockville Gaol.....	28
Belleville do	28
Brantford do	29
Berlin do	29
Brampton do	29
Cayuga do	30
Cornwall do	30
Cobourg do	30
Chatham do	31
Goderich do	31
Guelph do	32
Hamilton do	32
Kingston do	33
London do	33
Lindsay do	34
L'Orignal do	35
Milton do	35
Napanee do	35
Ottawa do	36
Owen Sound do	36
Perth do	37
Picton do	37
Pembroke do	38
Peterborough Gaol.....	38
Simcoe Gaol	38
Sarnia do	39
Sandwich do	39
St. Catharines Gaol.....	40
Sault Ste Marie do	40
Stratford Gaol.....	41
St. Thomas do	41
Toronto do	42
Whitby do	4
Welland do	4
Woodstock do	44
Walkerton do	44

	PAGE
Report on Provincial Reformatory, Penetanguishene.....	45
General Report on Asylums for the Insane.....	57
SEPARATE REPORTS ON THE STATE AND MANAGEMENT OF ASYLUMS FOR THE INSANE :—	
Asylum for the Insane, Toronto.....	70
Asylum for the Insane, London.....	73
Asylum for the Insane, Kingston.....	79
Asylum Expenditures for 1870-71.....	84
Asylum Estimates for 1872.....	86
Report upon the Ontario Institution for the Deaf and Dumb, Belleville.....	89
Report upon the Ontario Institution for the Blind, Brantford.....	99
Report upon the Asylum for Adult Idiots.....	103
General Report upon Hospitals and Charitable Institutions.....	105
Hospital Statistics.....	108
Statistics of Charitable Institutions.....	110
SEPARATE REPORTS UPON HOSPITALS AND CHARITABLE INSTITUTIONS :—	
Kingston General Hospital.....	112
Toronto do do	113
Hamilton do do	114
London do do	115
County of Carleton General Protestant Hospital.....	116
Ottawa Roman Catholic Hospital.....	116
Hotel-Dieu Hospital, Kingston.....	117
St. Catharines General and Marine Hospital.....	117
Eye and Ear Infirmary, Toronto.....	118
House of Industry, Kingston.....	118
House of Industry, Toronto.....	120

APPENDIX.

Report on Asylum for the Insane, Toronto, by Dr Workman, Medical Superintendent ...	123
Report on Asylum for the Insane, London, by Dr. Landon, Medical Superintendent.....	140
Report on Institution for the Deaf and Dumb, by Dr. Palmer, Principal.....	163
Report on Provincial Reformatory by the Warden.....	172

FOURTH
ANNUAL REPORT

OF THE

Inspector of Asylums, Prisons, &c.
FOR ONTARIO.

OFFICE OF THE INSPECTOR OF ASYLUMS, PRISONS, &c., ONTARIO.

Toronto, October, 1871.

*To His Excellency the Honourable WILLIAM PEARCE HOWLAND, C.B.,
Lieutenant-Governor of the Province of Ontario, &c., &c.*

MAY IT PLEASE YOUR EXCELLENCY :

I have the honour to present my Fourth Annual Report on the condition and management of the several Asylums, Prisons, Hospitals, and other Charitable and Penal Institutions in the Province of Ontario, prepared and submitted in conformity with the terms of the provisions of the "Prison and Asylum Inspection Act, 1868."

In addition to the establishments heretofore reported upon, the law requires that the "Inspector shall have and perform the same powers and duties with respect to any other "Lunatic Asylum or Asylums, or of any Asylum for Idiots, or for the Deaf and Dumb, "or Blind, that may have been, or may be, erected at the public expense, as are vested in "him by this Act, with respect to the said Lunatic Asylum at Toronto." Under the provisions of this clause of the Inspection Act, I now submit for your Excellency's information my first report on the operations of the London Asylum for the Insane, and the Ontario Institution for the education of the Deaf and Dumb, Belleville, which have now been in operation for twelve months.

I likewise submit all information obtained in relation to the educational interests and administration of the domestic affairs of the Ontario Institute for the Blind, now in course of erection at Brantford, with a view to the establishment of that Institution on a proper basis. Information obtained, with a similar object, in respect to the Asylum for Idiots now being constructed on the London Asylum property, is also annexed.

In compliance with the provisions of the "Central Prison Act," I have embodied in this report, for the consideration of your Excellency, certain suggestions and recommendations respecting the construction and establishment of the Central Prison, for the erection of which the sum of \$150,000 was appropriated by the Legislature at its last Session.

Forming the Appendix will be found the Annual Reports of the Superintendents of Asylums for the Insane, together with those of the Warden, Chaplains and Surgeon of the Provincial Reformatory, Penetanguishene; and the Principal of the Ontario Institution for the education of the Deaf and Dumb; each giving an account of the operations and proceedings of the Institutions under their charge.

The several Institutions now placed by Statute under my supervision and inspection, are as follows:—

Three Asylums for the Insane (Rockwood not subject to official inspection).

The Ontario Institution for the Deaf and Dumb.

The Provincial Reformatory, Penetanguishene.

The Institution for the Blind, Brantford, now nearly completed.

The Central Prison, Toronto, now in course of construction.

Thirty-seven Common Gaols and three District Lock-ups.

In addition to the Public Institutions above enumerated, inspection has to be made of the following Charitable Establishments aided by Government grants, viz.:—

Eight General Hospitals.

Two Houses of Industry.

Eight Orphan Asylums.

One Eye and Ear Infirmary.

Five Benevolent Institutions of various descriptions.

The entire cost to the Province of maintaining and aiding such of the above Institutions as were in operation for the year ending 30th September, was as follows:—

Asylums for the Insane	\$ 178,768 73
Provincial Reformatory.....	23,889 82
Institution for the Deaf and Dumb	21,062 98
*Common Gaols.....	102,903 61
Aid to 24 Benevolent Institutions.....	40,260 00
	<hr/>
	\$366,885 14

* About half of this amount paid by Counties.

PRISONS.

The total number of prisoners committed to the several Common Gaols of the Province, for the year ending 30th September, 1871, was 6,615, of whom 4,915 were males, and 1,700 females. A comparison of these figures with the tables of the two preceding years gives the following result:—

	Males.	Females.	Total.
Total number of prisoners committed for the year ending 30th September, 1869.....	3,893	1,762	5,655
Total number of prisoners committed for the year ending 30th September, 1870.....	4,534	1,845	6,379
Total number of prisoners committed for the year ending 30th September, 1871.....	4,915	1,700	6,615

It would thus appear that the commitments, for the period now reported upon, were 237 in excess of the corresponding period of 1869-70, and 961 over that of 1868-69. This increase does not, however, equally apply to both sexes, for while the annexed tables indicate an increase of 381 male prisoners over 1869-70, and 1,622 over 1868-69, they also exhibit a decrease of 145 females as compared with 1869-70, and 62 less than in 1868-69. It is also satisfactory to observe that the decrease in the commitment of female prisoners extends both to those over and under 16 years of age, the decrease in the number committed of the latter age being nearly equal to 50 per cent., while males of the same age have slightly increased. The increase in male prisoners, although pretty evenly distributed over thirteen Counties, is more marked in the returns received from Barrie, Simcoe, Guelph, St. Thomas and Pembroke, and is attributable, no doubt, in most instances, to the presence of a considerable foreign population engaged in the construction of railways. The ratio of re-committals to the total commitments remains about the same as last year, with the exception of those committed oftener than three times, which shows an increase of about ten per cent., thus indicating a further addition to the already large list of habitual offenders who are almost constant inmates of our Gaols.

A comparison of the figures in respect to "Nationalities" and "Religions" exhibits singular uniformity in the ratio of increase as compared with the previous returns.

The column giving the civil state of prisoners, shews that of the entire commitments for the year, 33 per cent. were married, and 67 per cent. unmarried. A further analysis of these figures in respect to sex, indicates that 33.71 per cent. of the males were married, and 66.29 per cent. unmarried, and of the females 31.40 per cent were married, and 68.60 per cent. unmarried.

From the returns furnished, in respect to the "Habits of prisoners" and degree of education, it would appear that 4,046, or 61.18 per cent., of the prisoners committed during the year were known to be intemperate in their habits, and 1,722, or a little over 25 per cent., of the entire number could neither read nor write.

The greatest number of prisoners in the several Gaols of the Province at one time during the year was 838. The number of prisoners in custody on the 30th September, the close of the official year, and the nature of their imprisonment are given in the following table:—

TABLE shewing the total number of Prisoners in the several Gaols of the Province, on the evening of 30th September, 1871, and the nature of imprisonment.

NAME OF GAOL.	NUMBER AND CLASSIFICATION OF PRISONERS.				NATURE OF IMPRISONMENT.			
	Men.	Women.	Youths under 16.	Total.	Waiting Trial.	Default of Bail.*	Insane or Idiotic.	Under Sentence.
Brantford	8	7	4	19	5	...	1	13
Barrie	18	7	1	26	...	...	11	15
Berlin	8	...	...	8	3	2	...	3
Brampton	6	1	1	8	1	...	1	6
Brockville	10	3	4	17	1	...	...	16
Belleville	9	5	...	14	...	1	2	11
Oayuga	5	2	...	7	3	...	...	4
Oornwall	2	...	...	2	1	...	...	1
Oobourg	14	7	...	21	4	1	5	11
Chatham	8	4	2	14	2	...	1	11
Goderich	6	...	...	6	1	1	...	4
Guelph	5	...	...	5	...	1	...	4
Hamilton	31	30	2	63	1	5	1	56
Kingston	15	10	2	27	6	...	2	19
London	27	13	...	40	11	1	1	27
Lindsay	4	1	1	6	1	1	1	3
L'Orignal .....	...	...	...	...	...	...	...	...
Milton	4	1	1	6	...	...	1	5
Napanee	5	1	...	6	1	1	...	4
Ottawa	13	5	...	18	3	...	...	15
Owen Sound	9	3	...	12	...	...	6	6
Perth	6	...	...	6	...	2	2	2
Pictou	2	...	...	2	...	...	...	2
Pembroke	11	...	...	11	...	2	3	6
Peterboro'	6	3	...	9	...	...	2	7
Simcoe	3	3	...	6	4	...	1	1
St. Catharines	18	5	2	25	4	...	2	19
Sarnia	12	...	...	12	2	1	2	7
Stratford	7	6	1	14	2	...	5	7
Sandwich	15	6	1	22	4	1	...	17
St. Thomas	1	...	...	1	...	...	1	...
Sault Ste Marie	2	...	...	2	1	...	...	1
Toronto	73	56	2	131	28	4	6	93
Walkerton	1	3	...	4	...	...	2	2
Woodstock	7	2	...	9	3	...	1	5
Welland	6	...	1	7	2	...	...	5
Whitby	10	3	...	13	2	1	1	9
	387	187	25	599	96	25	61	417

From the above return it appears that there were 599 inmates in the several Common Gaols of the Province on the night of the 30th September, against 435 on the corresponding period of last year; 387 of this number were men, 187 women and 25 youths under 16 years of age.

Of the total number in custody on that day 96 were waiting trial, 25 in default of bail, 417 were under sentence and 61 had been committed as insane, idiotic, or otherwise incapable of taking care of themselves.

With respect to the last named class, it should be stated that since the 30th September, 9 of the number have been removed to Asylums for the Insane, under the warrant of His Excellency the Lieutenant-Governor, and three have been discharged from custody having been restored to a sound mind. The remaining 49 of the class referred to, are cases of congenital idiocy, semi-idiot and imbeciles; and although certificates of insanity have in some instances been granted for the purpose of obtaining their transfer to an Asylum, an examination into their past history, as well as their general appearance and manner, renders it very apparent that, however unsuitable a Common Gaol may be for their residence, they are certainly not proper subjects for a Lunatic Asylum. Many of them

although weak minded are perfectly quiet and harmless, and if treated kindly are obedient, and very readily perform the work required of them. There appears to be no good reason why some of these cases should not be discharged from Gaol, and returned to their relatives, or placed in a private house, where they could be far better cared for than in the wards of a Common Gaol, and where some of them could make themselves quite useful. Probably 30 of the number are proper subjects for removal to the Idiot Asylum as soon as that institution is ready for their reception.

Among the prisoners classed as "under sentence" are not a few who were committed as vagrants, who neither committed nor had any intent to commit an offence, and whose only crime was *homeless* poverty and old age, very often conjoined with physical disease. The commitment of this kind of *vagrants* to prison, is not only entirely at variance with the dictates of humanity, but at once turns the Gaol into a Poor House and Hospital, and very often seriously interferes with a proper classification of criminal prisoners.

In some instances men and women have been committed under the Act for two months, and before the expiration of the period, and without giving the person an opportunity to commit a fresh act of vagrancy, a new commitment has been placed in the hands of the Sheriff, inflicting on the vagrant another two months' custody. In other cases the farce of attempting to legalize such an act is waived, and the person is kept in continuous confinement for months and years, and in some instances until he is discharged by death.

However excellent the main object of the "Act respecting vagrants" may be, it is very clear that so long as some of its *elastic* provisions remain in force, through which the class of persons just referred to are sent to Gaol, so long will the erection of County Poor Houses be postponed in many Counties.

The following table shews the number of prisoners whose maintenance during custody was defrayed by Municipalities, and of those supported by the Province out of the appropriation for Criminal Administration. Although, numerically, Municipal prisoners are largely in excess of criminals supported by Government, it must be borne in mind that the former are nearly all committed for short dates, while the latter, pending trial and under sentence, are in confinement for much longer periods. The returns which I have received do not at present enable me to make a comparison in respect to cost, but in future the total number of days' custody of each class of prisoners will be given in detail.

TABLE shewing the number of prisoners committed for the year ending 30th September, 1871, and how maintained:—

NAME OF GAOL.	Total No. of prisoners committed.	No. whose maintenance was defrayed by counties.	No. whose maintenance was paid by the Province.
Brantford	305	230	75
Barrie	168	97	71
Berlin	50	18	32
Brampton	43	19	24
Brockville	154	100	54
Belleville	145	110	35
Cayuga	64	42	22
Cornwall	26	21	5
Cobourg	134	70	64
Chatham	99	72	27
Goderich	73	54	19
Guelph	154	107	47
Hamilton	758	607	151
Kingston	285	225	60
London	412	165	247
Lindsay	49	27	22
L'Orignal	11	7	4
Milton	37	17	20
Napanee	53	32	21
Ottawa	451	406	45
Owen Sound	78	59	19
Perth	62	44	18
Pictou	25	24	1
Forward...	3,636	2,524	1,083

TABLE shewing the number of prisoners committed, &c.—*Continued.*

NAME OF GAOL.	Total No. of prisoners committed.	No. whose maintenance was defrayed by counties.	No. whose maintenance was paid by the Province.
<i>Forward</i>	3,636	2,524	1,083
Pembroke	53	34	19
Peterborough	100	88	12
Simcoe	93	43	50
St. Catharines	126	82	44
Sarnia	130	94	36
Stratford	83	50	33
Sandwich	219	33	181
St. Thomas	53	29	24
Sault Ste. Marie	12	29	12
Toronto	1,787	1,506	281
Walkerton	22	14	8
Woodstock	70	39	31
Welland	86	60	26
Whitby	145	109	36
	6,615	4,739	1,876

The following table will shew the entire number of prisoners *sentenced* and the periods of imprisonment given to them :

NAME OF GAOL.	NUMBER SENTENCED.			PERIODS OF SENTENCE.					
	Males.	Females.	Total:	30 days and under.	From 30 to 60 days.	From 60 to 90 days.	From 90 days to 6 months.	From 6 months to 1 year.	From 1 year to 2 years.
Brantford	158	58	216	149	57	4	5	1	.....
Barrie	140	24	164	138	9	4	6	6	1
Berlin	22	2	24	14	6	.....	3	1	.....
Brampton	24	2	26	11	4	2	2	3	4
Brockville	87	23	110	77	22	4	6	1	.....
Belleville	66	47	113	71	39	1	2	.....	.....
Cayuga	29	19	48	41	2	3	2	.....	.....
Cornwall	16	1	17	15	1	.....	.....	.....	1
Cobourg	53	34	87	36	19	21	10	.....	1
Chatham	80	6	86	66	8	8	4	.....	.....
Goderich	26	3	29	18	7	2	.....	2	.....
Guelph	57	.....	68	53	6	4	3	.....	2
Hamilton	491	236	727	411	222	29	44	17	4
Kingston	118	126	244	184	47	3	3	7	.....
London	140	59	199	111	67	9	9	3	.....
Lindsay	36	3	39	25	9	5	.....	.....	.....
L'Orignal	2	.....	2	1	.....	.....	.....	.....	1
Milton	22	2	24	19	2	1	1	1	.....
Napanee	26	4	30	7	16	2	5	.....	.....
Ottawa	193	100	293	231	40	14	7	1	.....
Owen Sound	30	5	35	19	10	.....	1	2	3
Perth	35	8	43	20	12	5	2	2	2
Pictou	24	1	25	25	.....	.....	.....	.....	.....
Pembroke	35	1	36	25	9	1	.....	1	.....
Peterboro'	75	17	92	47	23	12	3	3	4
Simcoe	46	6	52	34	.....	1	11	1	5
St. Catharines	73	24	97	37	51	5	4	.....	.....
Sarnia	40	2	42	24	6	4	5	.....	3
Stratford	40	12	52	36	12	.....	3	1	.....
Sandwich	87	40	127	84	33	8	2	.....	.....
St. Thomas	32	1	33	28	4	.....	.....	1	.....
Sault Ste. Marie	7	.....	7	5	1	1	.....	.....	.....
Toronto	650	398	1,048	636	246	43	90	11	22
Walkerton	7	1	8	6	.....	.....	.....	.....	2
Woodstock	34	2	36	22	10	2	2	.....	.....
Welland	70	16	86	67	9	2	7	1	.....
Whitby	82	9	91	83	2	3	3	.....	.....
	3,153	1,303	4,456	2,876	1,011	203	245	66	55

The above table only shows the number of prisoners sentenced to imprisonment in gaols, and not to the Kingston Penitentiary* or Provincial Reformatory, at which establishments the periods of sentence exceed two years. It would thus appear that of the 6,615 prisoners who passed through the gaols, 4,456 were sentenced to confinement for periods varying from two years to under thirty days; 48 were sentenced to the Provincial Reformatory, and 149 to the Kingston Penitentiary, making 4,653 prisoners who were under sentence. The remainder (1,962) were merely *detained* in gaol for certain periods: some charged with criminal offences, but acquitted when brought to trial; others committed for insanity, want of sureties to keep the peace, contempt of court, debtors, &c., &c.

The operations of the Interim Sessions Court have materially lessened the cost of maintaining criminals, by the speedy discharge of those pronounced not guilty, and by placing under immediate sentence a considerable number of prisoners, who formerly had to remain in gaol until tried before a Court of competent jurisdiction. From the following table shewing the operations of these Courts, it would appear that 608 prisoners elected thus to be tried, 176 of whom were acquitted, 295 sentenced back to gaol, 92 to the Penitentiary, and 34 to the Provincial Reformatory.

TABLE shewing the number of prisoners who elected to be tried at the Interim Sessions Courts, for the year ending 30th September, 1871, and the result of such trials:—

NAME OF GAOL.	Total No. of prisoners tried.	Acquitted.	Sentenced back to Gaol.	Sentenced to Penitentiary.	Sentenced to Penitentiary or Reformatory.
Brantford	33	10	19	3	1
Barrie	30	5	23	1	1
Berlin	20	2	13	4	1
Brampton	19	2	13	4	.....
Brockville	16	4	10	1	1
Belleville	5	3	2	.....	.....
Cayuga	17	5	11	.....	1
Cornwall	3	.....	2	1	.....
Cobourg	24	5	11	3	5
Chatham	15	.....	11	3	1
Goderich	15	7	7	1	.....
Guelph	23	7	14	2	.....
Hamilton	68	23	37	6	2
Kingston	20	4	13	1	2
London	45	16	21	8	.....
Lindsay	17	5	11	1	.....
L'Orignal	4	2	1	1	.....
Milton	12	.....	9	3	.....
Napanee	8	2	4	2	.....
Ottawa	34	7	19	2	6
Owen Sound	7	1	4	2	.....
Perth	3	1	1	1	.....
Pictou .....	.....	.....	.....	.....	.....
Pembroke	*16	1	4	1	.....
Peterborough	11	2	8	1	.....
Simcoe	22	5	12	3	2
St. Catharines	13	4	6	2	1
Sarnia	*32	6	16	6	3
Stratford	24	7	14	1	2
Sandwich	26	6	14	5	1
St. Thomas	14	2	6	5	1
Sault Ste. Marie	3	.....	3	.....	.....
Toronto	62	*23	28	10	1
Walkerton	2	2	.....	.....	.....
Woodstock	12	2	9	1	.....
Welland	13	2	8	3	.....
Whitby	20	3	11	4	2
	608	176	295	92	34

PRISON DIET.

A very marked improvement has taken place in the mode of providing and serving the

* Since writing the above I find that some of the two years prisoners were sentenced to the Penitentiary.

prison diet, as well as in the general management of that branch of Gaol administration. The very objectionable practice, which obtained until lately to a very serious extent, of allowing the Keepers of Gaols to provide the Prison rations, at a fixed, and very often exorbitant, rate has nearly disappeared, and with it one of the most fertile sources of complaint on the part of prisoners that I had to deal with. Wherever a violation of the dietary regulations exists, particularly where Gaolers are pecuniarily interested in providing the food, prisoners are not slow to point out deficiencies and irregularities in the service, sometimes stating them truthfully, but more frequently magnifying the defects, and the County authorities who still persist in perpetuating the evil should consider that in place of doing the Keeper of the Gaol a service by allowing the matter to remain in his hands, they are really inflicting upon that official a serious injury by placing him in a very false and unenviable position with the prisoners committed to his charge.

On the other hand, if the provisions and stores required for Gaol purposes are provided by contract, and cooked in the Prison kitchen by a prisoner or prisoners detailed for that service, under the supervision of the Gaoler, Turnkey, or Matron, and the food served in strict accordance with the prescribed regulations which should be printed and exposed in every corridor of the Gaol, then all just cause of complaint in the matter as between prisoners and prison officials will be effectually removed, and complete uniformity in Gaol dietaries will be effected throughout the Province. The County authorities who still neglect or refuse to comply with the regulations are as follows:—

Sarnia Gaol where the Gaoler receives 20c. for the daily rations of each prisoner.									
Pembroke	"	"	"	"	25c.	"	"	"	"
St. Thomas	"	"	"	"	25c.	"	"	"	"
L'Orignal	"	"	"	"	25c.	"	"	"	"
Cayuga	"	"	"	"	25c.	"	"	"	"
Perth	"	"	"	"	15c.	"	"	"	"
Chatham	"	"	"	"	14c.	"	"	"	"

Although the cost of diet in the two Gaols last named is only a little in advance of the average cost of rations provided in conformity with the rules, still the system through which such rations are furnished is no less objectionable on that account, and therefore they are included in the list. As there are no good reasons for allowing the practice to continue any longer—for, as has been pointed out in previous Reports, in Gaols to which few prisoners are committed, and where difficulty exists in having the supplies delivered by contract—it is only necessary to authorize the Gaolers to purchase them, and render an account of the actual cost of the same. It only remains for me under these circumstances to recommend that after the quarter ending 31st December, all payments from the criminal administration appropriation for the maintenance of criminal prisoners in the Gaols mentioned, be paid at the average cost of rations, purchased and served in the proper manner.

The following scale of diet prescribed by the regulations, and which is now in general use was framed with a view to rendering Gaol fare a material element of prison discipline, and while it is sufficiently *hard* to effect that desirable result, it will not be denied by those competent to judge of the matter, that an average weekly allowance of 350 ounces of solid food is sufficient for the health and nourishment of men and women confined in a Gaol with little exercise, and still less hard labour to perform, of which no better proof can be given than that nearly all prisoners who enter the Gaols, in ordinary health, and remain for a month and upwards, are discharged with a gain of weight.

The Prison dietaries are divided into four classes, as follow:—

CLASS 1.

Convicted prisoners confined for any time not exceeding 14 days.

Males.

Females.

Breakfast.—1 pint of oatmeal gruel, 6 oz. of bread.....Same as Males.

Dinner.—12 oz. of bread.....10 oz of bread.

Supper.—Same as breakfast.....As breakfast.

All prisoners to have in addition 1 pint of soup at dinner *twice* per week. Those at hard labour to have 1 pint of soup at dinner *four* times per week.

CLASS 2.

Convicted prisoners not employed at hard labour for periods exceeding 14 days.

	Males.	Females.
<i>Breakfast</i>	1 pint oatmeal gruel, 8 oz. bread.	1 pint gruel, 6 oz. bread.
<i>Dinner,</i> 2 days.	1 pint of soup 8 oz. of bread.....	1 pint of soup, 6 oz. of bread.
<i>Dinner,</i> 2 days.	5 oz. cooked meat, without bone, 8 oz. bread, $\frac{1}{2}$ lb. of potatoes.	4 oz. cooked meat, without bone, 6 oz. bread, $\frac{1}{2}$ lb potatoes
<i>Dinner,</i> 3 days.	8 oz. bread, 1 lb. of potatoes, or a pint of gruel when potatoes can not be had.	6 oz. bread, 1 lb. of potatoes or 1 pint of gruel.
<i>Supper.</i>	Same as breakfast,	As breakfast.

CLASS 3.

Convicted prisoners employed at hard labour for any time exceeding 14 days, but not more than 6 weeks.

	Males.	Females.
<i>Breakfast.</i>	1 pint oat meal gruel, 8 oz. bread.	1 pint oatmeal gruel, 6 oz. bread.
<i>Dinner,</i> 2 days.	1 pint soup, 8 oz. of bread	1 pint of soup, 8 oz. bread.
<i>Dinner,</i> 3 days.	6 oz. of cooked meat without bone, 8 oz. of bread, $\frac{1}{2}$ lb. of potatoes.	5 oz. cooked meat without bone, 6 oz. of bread, $\frac{1}{2}$ lb. of potatoes.
<i>Dinner,</i> 2 days.	8 oz. of bread, 1 lb. of pota- toes, or a pint of gruel, when potatoes cannot be had.	6 oz. of bread, 1 lb. potatoes or 1 pint of gruel when po- tatoes cannot be had.
<i>Supper</i>	Same as breakfast.	As breakfast.

CLASS 4.

Convicted prisoners employed at hard labor, for any period exceeding 6 weeks,

	Males.	Females.
<i>Breakfast.</i>	1 pint oatmeal gruel, 8 oz. of bread.	1 pint gruel, 6 oz. of bread
<i>Dinner,</i> 2 days.	1 pint of soup, 8 oz of bread.	1 pint of soup, 6 oz. of bread
<i>Dinner,</i> 4 days.	6 oz. of cooked meat without bone, 8 oz. of bread, $\frac{1}{2}$ lb of pota toes	5 oz. cooked meat without bone, 6 oz. of bread, $\frac{1}{2}$ lb, of potatoes.
<i>Dinner,</i> 1 day.	8 oz. of bread, 1 lb. of potatoes or 1 pint of gruel, when po- tatoes cannot be had,	6 oz. of bread, 1 lb. of pota- toes or 1 pint of gruel when potatoes cannot be had.
<i>Supper</i>	Same as breakfast.	As breakfast.

Witnesses for the Crown and debtors to be placed on same diet as class 3.

Unconvicted prisoners on same diet as class 2, while not working at hard labour:—If they voluntarily work at hard labour, they shall be placed on same diet as class 4.

GENERAL RULES RESPECTING THE DIETARIES.

All Prisoners shall be allowed at their meals as much good water and salt as they choose. The gruel should be made with 2 oz. of oatmeal to a pint of water:—Indian meal in the same quantities may be used instead of oatmeal.

Milk may be used, where convenient, instead of gruel.

A beverage made with roasted pease or barley, may also be used twice or thrice a week instead of gruel at breakfast:—But when this beverage is used, 2 oz. more of bread should be added.

Cocoa made with $1\frac{1}{2}$ oz. of nibs or beans to a pint of water, may be advantageously used once or twice a week instead of gruel, at breakfast, especially during the winter.

The soup should contain 3 oz. of cooked meat, without bone: the usual quantities of vegetables, with pepper and salt.

When pork is given at dinner, 1 oz. less than the quantity of meat above prescribed should be given:—fish may be substituted for meat once or twice a week, but 2 oz. of fish should be allowed over the allowance of meat.

The oatmeal or Indian meal, and the coffee or cocoa may be sweetened with molasses.

Carrots and parsnips may be occasionally substituted for potatoes.

Boys under 14 years of age should have the same allowance of food as the women.

In case of sickness the regulation of the diet of the prisoners shall be left exclusively in the hands of the medical officer of the prison.

ESCAPES.

Fifteen prisoners effected their escape, from the several Gaols, during the past year, of whom seven were recaptured and eight are still at large.

Under the terms of a commission issued to me, I held eight investigations into the circumstances connected with these escapes, and forwarded the evidence taken, together with my report thereon, to the Honourable the Provincial Secretary. From an examination of these reports, I find that 4 escapes are attributable to a violation of the law, in taking prisoners beyond the precincts of the Gaol to work; 2 to internal structural defects in the Gaols; 5 to the want of proper walls to enclose the working yard (although in two cases the want of supervision was apparent); and 4 to gross carelessness and want of vigilance.

HEALTH OF PRISONERS.

It is the duty of Gaol Surgeons to see every prisoner confined, at least every week and oftener if required; they have also frequently to inspect the Gaol, and report any want of drainage, warmth, or ventilation, or any insufficiency of clothing, or bedding, bad quality of food, or anything that will be likely to prejudice the health of prisoners. During the past year, the health of prisoners has been generally good, notwithstanding over-crowding in some Gaols, and bad sanitary regulations in others.

24 deaths occurred, including two sentenced to death by hanging.

GAOL EXPENDITURE.

The total ordinary Gaol Expenditure for the past year for food, fuel, prison clothing, officials' salaries, and *ordinary* repairs was \$102,903.61.

A detailed analysis of this expenditure, in respect to "Officials' salaries" and other Gaol expenditure, and the relative cost per prisoner for such services in each Gaol, is given in the following tabular statement, an examination of which, and a comparison of the figures in those prisons which receive and maintain about the same number of prisoners, will confirm in the strongest manner the statement made in my last report, that "there is a singular want of uniformity in Gaol expenditures."

No. 1.—GAOL EXPENDITURES.

NAME OF GAOL.	No. of Officers and Employees in Gaols.	No. of Prisoners passed thro' the Gaol during the year.	SALARIES.					Cost per Prisoner for Salaries.	Other Gaol ex-penditures—Salaries excepted.	Cost per Prisoner for Gaol ex-penditures other than Salaries.	Entire Gaol ex-penditure.	Cost per Prisoner on entire Gaol expenditure.
			Gaoler.	Turnkeys.	Matron.	Gaol Surgeon.	Total amount of Gaol Official Salaries.					
Brantford.....	4	305	\$750 00	\$450 00	\$100 00	\$150 00	\$1,450 00	\$4 75	\$1,901 38	\$6 23	\$3,351 38	\$10 98
Barrie.....	4	168	840 00	200 00	60 00	200 00	1,225 00	7 90	1,225 45	11 16	2,501 45	15 20
Berlin.....	4	51	500 00	400 00	100 00	200 00	1,200 00	23 53	569 26	25 20	1,769 26	34 69
Brampton.....	4	43	500 00	365 00	100 00	50 00	1,015 00	23 60	1,086 75	7 05	2,099 49	48 80
Brookville.....	4	154	800 00	200 00	100 00	100 00	1,200 00	7 78	1,086 75	10 93	2,286 75	14 83
Belleville.....	4	145	400 00	400 00	200 00	100 00	1,100 00	7 58	1,586 00	14 40	2,686 00	18 51
Caraga.....	4	64	500 00	300 00	80 00	140 00	1,020 00	15 93	921 74	17 49	1,941 74	30 33
Cornwall.....	4	26	740 00	200 00	60 00	50 00	1,050 00	40 38	194 91	7 49	1,244 91	47 87
Cobourg.....	4	134	800 00	500 00	200 00	80 00	1,580 00	11 79	1,420 25	10 59	3,000 25	22 38
Chatham.....	4	99	539 50	309 50	209 50	150 00	1,228 50	12 40	1,269 12	12 81	2,497 62	25 31
Goderich.....	4	73	550 00	400 00	100 00	120 00	1,170 00	16 02	600 75	8 23	1,770 75	24 25
Guelph.....	4	154	500 00	350 00	200 00	200 00	1,250 00	8 11	1,340 00	8 70	2,590 00	16 81
Hamilton.....	6	758	750 00	1,225 00	300 00	200 00	2,475 00	3 20	7,026 84	9 27	9,501 84	12 47
Kingston.....	4	285	700 00	200 00	150 00	100 00	1,150 00	4 03	2,669 00	9 30	3,819 00	13 33
London.....	7	412	800 00	1,638 05	410 00	150 00	3,018 05	7 39	3,077 16	7 46	6,125 21	14 85
Lindsay.....	4	49	400 00	200 00	100 00	80 00	880 00	17 85	385 21	7 85	1,265 21	25 70
L'Orignal.....	3	11	360 00	.....	40 00	40 00	440 00	40 00	299 42	27 22	739 42	67 22
Milton.....	4	37	400 00	300 00	40 00	80 00	820 00	22 16	399 81	10 70	1,219 81	32 86
Napanee.....	4	53	400 00	200 00	100 00	75 00	775 00	14 62	218 96	4 13	993 96	18 75
Ottawa.....	5	451	800 00	850 00	200 00	100 00	1,950 00	4 32	2,355 92	5 22	4,305 92	9 54
Owen Sound.....	4	78	700 00	500 00	250 00	400 00	1,850 00	23 71	795 11	10 19	2,645 11	33 90
Perth.....	4	62	600 00	365 00	160 00	80 00	1,205 00	19 43	772 02	12 45	1,977 02	31 88
Pictou.....	3	25	400 00	191 66	.....	30 00	621 66	24 84	81 35	3 24	703 01	28 08
Pembroke.....	4	53	500 00	260 00	50 00	60 00	870 00	16 41	1,110 00	20 94	1,980 00	37 35
Peterboro'.....	4	100	500 00	300 00	100 00	120 00	1,020 00	10 20	1,273 08	12 73	2,293 08	22 93
Simcoe.....	4	93	500 00	300 00	200 00	80 00	1,080 00	11 61	1,119 31	12 03	2,199 31	23 64
St. Catharines.....	5	126	600 00	600 00	80 00	200 00	1,480 00	11 74	1,368 49	10 86	2,848 49	22 60
Sarnia.....	4	130	600 00	400 00	136 00	80 00	1,216 00	9 35	939 39	7 22	2,155 39	16 57
Straford.....	5	83	450 00	242 00	216 00	100 00	1,008 00	12 14	992 10	11 95	2,000 10	24 09
Sandwich.....	4	219	450 00	350 00	182 00	200 00	1,182 00	5 39	1,339 71	6 11	2,521 71	11 50
St. Thomas.....	4	53	700 00	300 00	100 00	100 00	1,200 00	22 64	646 00	12 18	1,846 00	34 82
Sault Ste. Marie.....	3	12	400 00	109 00	.....	21 50	530 50	44 20	527 62	43 96	1,038 12	88 16
Toronto.....	13	1,787	1,600 00	*5,120 00	560 00	600 00	7,880 00	4 40	6,061 97	3 72	14,541 97	8 12
Walkerton.....	4	22	600 00	350 00	150 00	80 00	1,180 00	53 63	883 59	17 40	1,563 59	71 03
Woodstock.....	4	70	800 00	400 00	200 00	200 00	1,600 00	22 85	1,470 00	21 00	3,070 00	43 85
Welland.....	4	86	345 00	312 00	204 00	80 00	941 80	10 61	913 20	10 61	1,855 00	21 53
Whitby.....	4	145	750 00	150 00	100 00	150 00	1,150 00	7 93	725 74	5 00	1,875 74	12 93
	162	6,615	22,544 50	19,087 21	5,537 50	4,982 30	52,151 51	Av., \$7.86	50,752 10	Aver., \$7.57	102,903 61	Aver., \$15.13

* This amount includes the salaries of the engineer, steward and van driver.

GAOL CONSTRUCTION AND REPAIRS.

The erection of new Gaols where old structures had been condemned, owing to the want of space, and the absence of nearly all the requisites of a prison, and the reconstruction of badly arranged and dilapidated buildings, as well as alterations, additions and repairs to those in which structural defects existed, have progressed so favourably, during the past year, that I trust that I shall shortly be able to report the provisions of the Inspection Act, in reference to the state and condition of Gaols, as fully complied with throughout the entire Province.

Recent legislation in respect to a central prison, has certainly done much towards the accomplishment of this result, in the removal of many difficulties and misunderstandings, that existed between County Councils and myself, in reference to the extent and character of the additions and alterations required to render certain Gaols as complete as possible, and has enabled me, in some instances, to modify the demands made upon such Counties in respect to Gaol accommodation.

The Gaol at *Sandwich* was completed and occupied in December last; the building is a solid substantial stone structure, and whether in respect to its style, material, or workmanship, the requirements of the Act have been fully recognized and carried out. The internal arrangement of the prison in respect to cubic space, means of classification, sanitary appliances, and the provision of rooms for kitchen, store room and laundry purposes, is very complete. The building was officially inspected, on the 28th March, and with the exception of a few defects referred to in my separate Report, the Gaol was approved of, and accepted as the Gaol for the County of Essex.

The reconstruction of the North Wing of the *Welland Gaol* had nearly been completed at my visit, on the 7th September. The old cell-work, which was badly arranged and in a very dilapidated state, has been entirely removed, and cells erected in the centre, with corridors extending around the same, and day-rooms at the front entrance substituted: although the width of the structure would not admit of very spacious corridors. The arrangement of the reconstructed building is very satisfactory, and will give abundant space for a thorough classification of prisoners. As the contract for reconstruction had been entered into without specifying for a prison kitchen, store room, and turnkeys' quarters, the Council was notified that the building could not be accepted, unless these rooms were provided. I have since been informed that arrangements have been made with the Contractor, for the alteration of a portion of the basement of the Court House, which will furnish space for the required domestic departments.

The County Council, for the United Counties of Leeds and Grenville, being requested to appoint a special committee, to confer with me in reference to the condition of the *Brockville Gaol*, the request was promptly complied with, and a meeting took place on the 20th April. The structural defects, referred to more particularly in my separate Report upon that Gaol, were fully examined into, and my suggestions for the erection of a building, to provide space for day rooms, as well as the enlargement of the windows, and the replacing of the solid oak doors with iron gates, with a view of improving the ventilation and lighting of the building, were approved of, and a contract for the performance of the work was shortly afterwards entered into. At my visit to the Gaol, on the 28th September, the work had commenced, and as far as it had progressed, the understanding arrived at between the special committee and myself was being fully carried out.

A new working yard has been enclosed with a stone wall, at the *Ottawa Gaol*; and the Garth system of heating the building by hot water has taken the place of the steam boiler in the basement, which was attended with so much risk and danger.

Plans and Specifications for alterations and repairs to the *Lindsay Gaol*, which, through defective construction, had become quite unsafe, were prepared by the Public Works Department, and by me transmitted to the Clerk of the County Council, for submission to that body. The plan of alterations was fully approved by the Council, and when completed will effectually remedy the defects of the Gaol. At an official visit paid to the Gaol, on the 10th October, the work was under progress, and, so far as it had gone, was strong and substantial.

After the Central Prison Bill became law, the following memorandum was transmitted to the Warden of the County of Perth, on the 22nd May, for the consideration and action of the Council.

"In view of the early establishment of a Central Prison, for the confinement of a certain

class of sentenced prisoners, the erection of a suitable building for the reception of adult idiots, many of whom are now inmates of Gaols, and the completion of increased Asylum accommodation, which will ensure the speedy removal of such of the Insane as are committed to the Gaols. The undersigned is of opinion that the requirements of the 'Prison and Asylum Inspection Act,' in respect to Gaol accommodation for the County of Perth, can be satisfied with a very considerable reduction, in the Gaol accommodation demanded of the County, before appropriations were made by the Legislature, for the purposes before named, which, when carried out, will have the effect of reducing the average number of inmates now confined in the Stratford Gaol.

"Anticipating this result, the undersigned is prepared to recommend two plans for alterations, additions and repairs to the Stratford Gaol, either of which may be accepted by the Council.

"1st. The removal of one of the present Gaol wings, and the erection upon the same ground (connecting it with the remaining portion of the old building,) of a stone structure, of sufficient dimensions to give space for sixteen cells, with all the requirements of modern prison construction, in respect to corridor space, ventilation, heating, etc., etc., with a working yard of proper area, surrounded by a wall of the regulation height, or, 2nd. By the following alterations and additions to the present building:—

"1st. Enlarging all the window openings, in the corridor, to the dimensions of 3 feet long by 2 feet wide, and in the day rooms 3 feet 6 inches long, and 2 feet 3 inches wide, all to be secured by round iron uprights, not less than one inch in diameter, passing through cross-bars 2 inches by $\frac{3}{4}$, the whole to be properly dowelled into cut-stone sills and caps.

"2nd. The removal of the present solid oak cell doors, and the substitution of iron gates, of such pattern and make as shall be approved. The locks for the same to be mortised into the jams, so that the fastenings shall be removed sufficiently far from the gate to prevent prisoners tampering with the same.

"3rd. The renewing of the floors on the lower corridors with $1\frac{1}{2}$ inch oak flooring.

"4th. Having the two outside yard walls lined with oak plank, sharp spiked on top.

"5th. Providing dry earth closets for summer use.

"Although the plan of alterations first indicated will cost a great deal more than the second I am of opinion that it could be done for \$8,000, and it is clear that the structure would be of a permanent and substantial character, and will effectually overcome sanitary and structural defects, that cannot be entirely remedied by carrying out the second plan, and in the event of additional prison accommodation being required, another wing could be added. While the adoption of the plan of alterations and repairs to the old building will only partially remedy the present defective ventilation and lighting of the building, and will at the same time render the Gaol more secure, they can only be accepted as a temporary substitute, as the state of the walls will not admit of permanent substantial alterations. But as the 16th Section, of the Prison and Asylum Inspection Act provides that due regard must be had to the ability of the Corporation to meet the expenses of providing Gaol accommodation, and as the Council represent that they are now heavily burdened with debt, it rests with the members of that body to decide whether the expenditure of from ten to fifteen hundred dollars, in making temporary alterations and repairs, will be more economical and efficient than an expenditure of \$8,000, which would do for all time to come."

On the reception of the above memorandum by the Warden, a Committee of the Council was appointed to confer with me, at which meeting a majority of the committee decided to proceed with the alterations and repairs indicated in the memorandum, when the work was immediately placed under contract, and will cost, when completed, about \$2,000. At an inspection of the Gaol, on the 24th October, the work was found in a very advanced state, and well done, both in respect to workmanship and material, a few defects that required attention being pointed out.

In accordance with the terms of a resolution, passed by the County Council of Wentworth, on the 25th October, 1870, I had a conference with a special committee of that body, on which occasion I gave full instructions for the preparation of plans for a new Gaol at *Hamilton*. The Council then offered a premium for the most complete set, and at a subsequent visit, all the plans sent in were examined, when those prepared by Mr. Milne were approved, subject to certain alterations and improvements. Provision was made for one hundred

cells, with all the other domestic requisites of a Gaol, including lodgement for the Gaoler, Matron, and Turnkeys. As soon as the Central Prison Act passed the Legislature, I had another meeting with the County Council, when the accommodation of the prison was reduced to 60 cells, and other modifications were made in the plans, which would considerably reduce the cost of construction. A site was also selected for the building, and a By-law passed by the Council for submission to the voters, authorizing the expenditure of \$60,000, for its erection. This By-law was submitted to the voters, on the 8th July, and was rejected. The Council again decided to submit the By-law to the electors, on the 15th September, when it was carried by a small majority. Tenders for the construction of the Gaol are now advertized for, and I have every reason to believe that the work will be proceeded with at an early day, when this long pending Gaol question will be satisfactorily settled, by the erection of a Gaol, that will be a credit to the wealthy County of Wentworth, and the abandonment of the worst Gaol in the Province.

The want of space and faulty construction in the Gaol at *Milton* prevent not only a classification of the prisoners, but a proper separation of the sexes. The evil effects of this condition of things were so apparent, at my visit on the 8th August, that I at once forwarded a copy of my Report on the condition of the prison, to the Clerk of the Council of Halton, for submission to the County Council, with a request that a special Committee be appointed, under the provisions of the Act, to confer with me as to the best means of remedying the defects. The Council has appointed a Committee, but a meeting has not yet taken place.

The state of the *St. Thomas Gaol* has frequently been referred to in my Annual Reports. A special Committee was appointed, in 1869, to confer with me and devise a mode of alterations and repairs, but although a plan was agreed upon, at our meeting, the County Council of Elgin, up to this day, has neglected to proceed with the work. At my last visit to the Gaol, the attention of the Council was called to the increased number of prisoners committed to the Gaol, and the serious defects, both of a structural and sanitary character, that existed therein, as well as to the number of escapes that have taken place, owing to the Gaol not being surrounded by a proper stone wall. The Council was again cautioned to proceed with the required additions and repairs. I have since received a communication from the Clerk of the Council, which would indicate that immediate action is about to be taken.

The defects of the *London Gaol* are minutely referred to in my separate report upon that prison, and although the requirements of the "Inspection Act," in respect to a conference with a special committee of the Council, have been fully complied with,—on which occasion I passed through the Gaol with the Warden and Committee, and pointed out the many structural and sanitary deficiencies of the building,—still nothing has been done to remedy them, and I question very much if action will be taken to effectually overcome the defects until the provisions of the Act are placed in force.

CENTRAL PRISON.

The Legislature having, at its last session passed an Act to provide for the establishment and government of a Prison, intermediate between the Common Gaols and Dominion Penitentiaries, for the reception and custody of prisoners, sentenced by the several Courts for periods not exceeding two years, and an appropriation of \$150,000 having been made by Parliament for that purpose, I accompanied the Hon. the Commissioner of Public Works, and the Government Engineer, on a visit of inspection to the Detroit House of Correction, and the Michigan State Prison at Jackson, for the purpose of informing ourselves in reference to the construction and management of these prisons, but more particularly to acquire such general information, through personal observation and conversation with men who are practically acquainted with the science of prison architecture and administration, as would assist and enable the Government to decide upon the following important particulars respecting penal institutions, with a view to the establishment of the Central Prison of Ontario on such a basis as would best enable it to accomplish the objects aimed at in its foundation :

1st. The proper location of such a Prison, the requirements of the site, and the quantity of land required upon which to erect the necessary buildings.

2nd. The style and class of buildings required, and their general external and internal arrangement.

3rd. Respecting the class of prisoners that should be sentenced to the Central Prison, and whether it is advisable to confine both sexes in the same Establishment.

4th. The management of the Prison in respect to discipline, domestic economy, and the general administration of its affairs.

5th. The trades, industries, or mechanical pursuits best adapted to the several capacities of the prisoners, and at the same time best calculated to render the prison self-sustaining.

On the 15th May, I transmitted to the Hon. the Provincial Secretary, for the information of His Excellency the Lieutenant-Governor, a report giving the result of my observation and inquiries into the several subjects indicated in the before-named headings, which will now be referred to in the order in which they are placed.

With respect to the location, site, and area of ground required for the Central Prison, it does not appear to have been considered necessary to have more land attached to the Prisons visited than is actually required for the site of the buildings, the enclosed yard space, and a portion of ground at the front entrance for ornamentation; it would, however, be well to secure sufficient area to render the buildings and yard walls entirely isolated, to prevent, as far as possible, communication with prisoners from the outside. To secure this, a space of at least one hundred feet should lie between any part of the building or enclosed premises, and the line of public streets or private properties.

It was generally admitted by the Prison authorities with whom I conversed, that the cost of supervision will not admit of placing any land under cultivation through the labour of prisoners of the class committed to such Prisons, either for farming or gardening purposes; no ground need therefore be acquired for that purpose. I would therefore recommend that from ten to fifteen acres of land be purchased with a frontage of not less than 700 feet,—the site to possess all the natural facilities required for cheap and effective drainage and an abundant supply of water.

It will at once be apparent that the successful working of the Central Prison will depend very much on its location and site. It should therefore be placed as near as practicable in a central position, in order that the transfer and removal of prisoners may be accomplished with as little expense as possible. It is also essentially necessary that the site should be convenient to railway, and, if practicable, to water communication, not only to facilitate the prompt and safe delivery of prisoners, but also to enable fuel, stores, material and manu-

factured articles to be received and shipped at all times of the year. It is also desirable that the Prison should be placed in a City or large Town in order that the products of prison labour may be exhibited, and a ready market for them secured.

With respect to the style and class of buildings required for a Prison of the kind contemplated, and their relative position to each other, there are three points to be determined: First. That they should in all respects be of sufficient strength and solidity to ensure the safe custody of prisoners. Second. That they should possess all the modern sanitary arrangements and appliances necessary to the health of the prisoners, particularly in respect to the size of the cells, the heating and ventilation, water-closets, lavatories, etc.; and third, that the general plan and arrangement of the several buildings shall be such as shall secure in the highest degree the utmost economy in management consistent with efficient administration.

In the Prisons visited in the United States it was observable that greater dependence is placed upon constant and active supervision over prisoners in order that escapes may be guarded against, than upon the strength and thickness of the walls. In Common Gaols where prisoners are frequently left to themselves for hours, there is greater necessity for solid masonry than in a penal establishment where the inmates are under the eye of guards both night and day. At the House of Correction in Detroit, where escapes seldom take place and prison-breaking is unknown, the walls are all constructed of brick, and only one and a half brick in thickness.

Should the Prison be erected at a point where good building-stone can be procured at a reasonable rate, that material would certainly be altogether preferable to brick, if for no other reason than that the structure would be rendered more solid and durable. But if stone can only be had at a very great advance in cost over brick, there can be no objection, as far as the safe custody of prisoners is concerned, to using the latter, particularly if laid in water lime, but in either event it will be necessary to construct the walls, surrounding the yards, of stone, and not less than twenty-two feet high.

With respect to the internal and external arrangements of the buildings, I would recommend that a central structure of three stories and basement of not less than 100 feet deep by 80 feet wide be erected. The front portion of it to be used on the first floor for prison offices, store rooms, &c., and the upper stories of the same for the Warden's quarters. The rear of said main building, which shall be divided from the front by a substantial stone wall and connected by side entrances with the front, shall constitute a part of the prison, and must be of more substantial construction than the front, with iron bars at all the windows and openings, and shall be used in the basement for kitchen and laundry purposes, with dumb waiters connecting with the first floor, which shall be used entirely for an associated dining-room, the second flat to be used for chapel and school-room, and the third flat for hospital purposes.

Extending from the main building above described, shall be erected two wings for dormitories, each wing containing sufficient cubic space for 125 cells and the necessary corridors; the cells to be erected in the centre, and surrounded by corridors not less than fifteen feet wide parallel with the cells, and 25 feet wide at the entrance from the centre building. The corridor space to be open from floors to ceiling, and for effective ventilation the windows to extend from within three feet of the floor to the point from where the arched roof springs.

There shall be three tiers or galleries of cells in each wing with forty-two separate cells in each tier, each cell to be not less than eight feet deep, eight feet high and five feet wide, with a direct means of ventilation (if communication with the other cells can be prevented) from each cell; there shall be an entrance from each of the wings respectively into the dining room, and by raised galleries and platforms to the schoolroom, chapel and prison hospital in the rear centre building. At right angles with the wings shall be erected the work-shops and other buildings connected with them, the dimensions of which rear buildings cannot be determined until the prison industries and mechanical pursuits are decided upon. At right angles with said work-shops a warehouse for raw material and manufactured goods shall be constructed.

The quadrangular yard space enclosed by the buildings described, to be not less than 350 long by 250 feet wide, to be used entirely for an airing court. The rear buildings at all points to be not less than sixty feet from the yard walls, having openings both to the front and rear.

The waggon and carriage entrance to the prison grounds and shops shall be from the front at the extreme end of one of the wings, with a road extending around the enclosure between the walls and the rear of the work-shops.

What class of prisoners shall be committed to the prison about to be established, and whether it shall be for the reception of both sexes, are two of the most important questions connected with the scheme, and upon the decision arrived at for their settlement depends in a very great measure, the future success of the Institution, not only in a financial sense, but what is of far greater importance, whether its establishment shall be made the means of overcoming the indiscriminate mixing of prisoners, the want of wholesome prison discipline and regulations of a corrective tendency, the almost entire absence of reformatory influences, the sloth and idleness, as well as the many other serious defects and evils which now form the most prominent characteristics of our present Common Gaol system.

Respecting the advisability of confining both sexes in the same prison, the very highest authorities in the specialty of prison administration have declared themselves in favour of separate establishments for women, and the National Congress on Penitentiary and Reformatory discipline, which met at Cincinnati, Ohio, last year, in their "Declaration of Principles" adopted and promulgated this principle, and already several States have passed laws creating separate prisons for women. That the principle is a correct one and founded upon the teachings of common sense and sound observation, no one at all conversant with the working of penal institutions will deny; and it is to be hoped that the day is not far distant, when the Province of Ontario will found an Industrial Prison for women with the official staff, attendants, Keepers and Instructors of the same sex; and then, and only then, will women be fully able to exercise and wield their great power and influence, in a practical way towards reclaiming the criminal and fallen of their sex. Apart from this view of the subject, it may also be mentioned that the construction and arrangement of a female prison should be entirely different and of a far less costly character than for males. And although there are several branches of industry in which both sexes might be profitably, and perhaps advantageously employed in the same establishment, still the advantages to be derived from the mixed system, which are of a very doubtful character, are not equivalent to the great moral benefits of the separate principle. I would therefore strongly recommend that the Central Prison be constructed and arranged only for the custody and employment of male prisoners.

In order that as many as possible of the evils of our Prison system may be avoided and the counter results accomplished, it is of vital importance that the Central Prison should be looked upon and accepted more as an Industrial Reformatory for adults, than as a Penitentiary for incorrigible criminals; and although in many instances it may be a very difficult matter to draw a distinguishing line between criminals and the offence that should consign one man to the Penitentiary and another to the Central Prison, it will not be denied that the establishment of a penal institution intermediate between the Common Gaols and Dominion Penitentiary, will greatly assist the solution of one of the most difficult problems in criminal jurisprudence that the Bench has had to deal with in the past, and which more than anything else has added to the responsibility of Judges in passing sentence upon criminals. While in most cases the offence committed determines the punishment and the period of its duration, it cannot be denied that there are extenuating circumstances in the commission of crime which render the grading and classification of prisoners in a graduated series of penal institutions an absolute necessity, but which in this Province, as between incarceration in the Common Gaols and Penitentiary, has unavoidably been disregarded in the past.

A visit to our Common Gaols will reveal the fact that many prisoners occupy cells in these local Institutions who barely escaped the Penitentiary, although, perhaps, they richly deserved it; while on the other hand, many have been sentenced to the Penitentiary with all the odium and disgrace that attach to such custody,—and none the less so because sentenced for short periods,—who would have been proper subjects for a prison of a character between the two extremes, both in discipline and administration, but more particularly in the results of the imprisonment in the future relations of the prisoner with the world. As these defects are attributable to the present system, it will at once be apparent that the founding of the Central Prison will provide a remedy for one of its most prejudicial features in the organization of a penal establishment, not only for the custody of many prisoners now sent to the Common Gaols, but also for a certain class of criminals at present sentenced to the Penitentiary. While the most beneficial results may be anticipated, through the establishment of the Central Prison, in the treatment of prisoners convicted of crime, its real aims and objects will never be fully realized and accomplished unless a well defined and comprehensive judicial measure is enacted to meet the cases of that large and increasing class of offenders against society,

now committed to the Common Gaols for such offences as drunkenness and disorderly conduct, want of sureties to keep the peace, (which in many instances is a mild term for wife-beating) keepers and frequenters of houses of ill fame, vagrancy and other offences, for which over three thousand commitments were made to the Common Gaols of the Province during the past year, or nearly half of the entire Gaol population. When it is considered that two-thirds of this number have been committed from twice up to twenty times, and many of them almost constant residents of some Gaol, at least fifty per cent. may safely be classed and looked upon as habitual offenders who were perhaps at first sufficiently punished, by a few days or weeks' incarceration in a Common Gaol, but who by their long career of degradation have forfeited all claim to the mistaken leniency of short sentences, and whose imprisonment for periods varying from two months up to two years in a well conducted Industrial Prison, would not only be for the welfare of the habitual offender, but most certainly for the best interests of society. As the ever recurring trial and conviction of this class of offenders, and the cost of supporting them in idleness for a considerable portion of the year in Gaols are a constant drain upon the public funds, it is but fair, if for no other reason than public economy, that they should be deprived of their liberty for longer periods and be *compelled* to earn their bread "by the sweat of their brow." That part of the Report having reference to the general management and discipline of the Central Prison, may very properly be joined to the last subjects under consideration, viz., the trades, industries, or mechanical pursuits best adapted to the several capacities of the prisoners and at the same time best calculated to render the prison nearly, if not altogether self-sustaining.

If it be true, and in certain grades of society the assertion is placed beyond the possibility of a doubt, that idleness is the parent of crime and vice, then I hold that it is equally true that industry is the greatest factor to the reformation of criminals and the reclaiming of the vicious. Firmly believing this to be the case, it naturally follows that a well devised scheme of prison industries is the most important element that can be introduced into the administration of the Prison System about to be inaugurated, both in respect to the discipline of the establishment and the general management of its affairs. I will go further and state that if it were possible or practicable to establish a Prison, founded on a system in which prisoners were directly interested in its success, morally and financially, the chances are that its good moral results in the reformation of prisoners, which cannot be measured, would be fully equal to its financial success which would be tangible and apparent. While the theory advanced may not hold good in a penal institution for incorrigible criminals, it is very certain that its principles must enter largely into the administration of an Industrial Reformatory for adults, and while the practical working of the scheme cannot be forced upon the institution in its infancy, it should at any rate be incorporated in its aims and objects, and matured with its growth and development. Upon this great principle in Prison administration hinge nearly all of the Reformatory elements and influences of a prison system, particularly with that class of offenders who, through idleness and sloth, drifted into drunkenness and vice, and from drunkenness and vice into the commission of some minor offence either against the person or property, that at length brought them within the grasp of the law. Teach this class of men *practically* that well directed industry is better than sloth, vice and petty crime, and interest them *practically* in this doctrine by instruction in some trade or handicraft, and who will venture to say that many of them will not return to the world wiser and better men? At any rate, to use the words of one of the most eminent prison reformers of the age, treat such men and women "in such a manner that they shall either be cured or kept under such continued custodial restraint as gives guarantee of safety from further depredations."

The opinion that prevails to some extent in Canada, that prison labour is antagonistic and destructive to ordinary skilled industry, may possibly have some force in Great Britain and other old settled and densely populated countries, but is utterly unworthy of the spirit of this Province which at the present moment is putting forth every effort to attract to its shores all classes of artisans, simply because they are all required, and can easily be absorbed by its workshops and hives of industry. And when the welfare of the whole Province in this respect is put into the scale against the interests of a few who may be interested in the particular trade or branch of industry adopted for the employment of prisoners, the objections urged against the system are unworthy of notice or comment. It is, however, of paramount importance that the industries of the Prison should be of *such a character as is best adapted to give employment to every man sentenced to the Prison, and that they should be conducted and*

carried on in such a manner as would best accomplish the objects aimed at, in the establishment of the Prison.

Considering the state of perfection to which machinery and mechanical appliances have been brought, the industry of the world is thrown open, from which to make choice of a suitable trade or class of mechanical pursuits that will furnish the best employment for prisoners; and as a variety of capacity, talent and skill is necessary to the successful operations of an ordinary workshop, the trade or trades which will give the greatest scope *in this respect* should be selected for the Central Prison.

Upon the decision arrived at in regard to the manner the industry shall be carried on, depends in a great measure the successful working of the scheme. Three systems or methods are now in operation in the several Industrial Prisons of this continent:—

1st. Leasing the prison, prisoners' labour, machinery, &c., for a certain yearly sum.

2nd. Hiring the labour of the prisoners for a specified sum per day for each inmate, generally known as the contract system.

3rd. Utilizing the labour of the prisoners for the entire use and benefit of the country, the Province supplying the capital and material necessary to carry on the industry.

The first system, which was born of necessity, although infinitely preferable to the prison sloth and idleness which it was calculated to supersede, is attended with such serious drawbacks and irreconcilable conflicts between the industrial management of the prison and the moral welfare of the prisoners, as well as the good government and discipline of the institution to which everything else should be subservient, that its adoption would be fatal to the best interests of the prison, and cannot, therefore, in my opinion, be entertained.

The same objections in a measure hold good in respect to the *contract system*, lessened or increased according to the extent of the power and control over prisoners placed in the hands of the contractor. If that control is practically unlimited for the sole purpose of making the uttermost farthing out of their labour, as in some instances it is, then the system is not one whit less objectionable than the first named. If on the other hand, a contractor can be found who will thoroughly identify himself with the general welfare of the prisoners, by supporting good discipline and government, and encouraging and promoting wholesome reformatory influences both in the workshop and in his general intercourse with the prisoners, and will at all times heartily co-operate with the Government in forwarding the interests of the Prison,—if such a man can be found, who is prepared to carry on such mechanical pursuits as the Government think most desirable to inaugurate, and is willing to pay a fair honest value for the labour of prisoners, then the most serious objections urged against the contract system disappears, and it may with comparative safety be introduced into the administration of the affairs of the Central Prison.

The last named system, viz., *placing prison labour entirely under the control and management of Government*, is that which meets with the most general favour, and is most highly commended by men who have been engaged in the work for a life time, and who from their extended experience and practical acquaintance with the general working, as well as the moral and financial results of every system that has had existence, are in every way qualified to pronounce upon the merits and demerits of each. After a careful investigation into the history of a considerable number of United States prisons, and the result of their systems of industrial management, there is little room for doubt that both *facts* and *figures* are largely in favour of Government control.

In many institutions where the contract system obtains, the amount received from contractors for the labour of prisoners is very considerably under the expenditures for maintaining the prison, *while at the same time contractors have made and are still making enormous sums out of their contracts.*

In several prisons this state of things has become so apparent, that within the past few years the contracts have been renewed at a great advance on previous rates, and in consequence a few of the contract system prisons are now self-sustaining, and some nearly so, whereas all of the prisons of any extent, in which the industries are under state or official management are self-sustaining, and in many instances pay a revenue above working expenses.

But while it is most desirable to have a *self-sustaining Industrial Prison*, to take the place of the *associated* idleness that now pertains to our Common Gaols, it must never be lost sight of that penal institutions are not founded for the purpose of yielding a profit from prison labour, but for the punishment, restraint and reformation of criminals, and as a means

to this, *prison industry* conjoined with thorough discipline, education and instruction, and other reformatory measures, are the most important auxiliaries that can be placed in the hands of prison authorities; and it is very certain that the prison officials and not *contractors* are best qualified to accomplish in the greatest degree the desired object. To ensure success in the management of the prison industries, I apprehend that all that is required is an honest practical clear headed manager, who has large experience in the management of men, and business tact, assisted by a staff of trade instructors, selected only for their special fitness for the position, both in respect to skill and proficiency in their respective trades, and their aptitude to impart their knowledge to others.

The site selected by Government upon which the Central Prison is now being erected, is a part of the Ordnance Reserve in the City of Toronto, lately purchased by the Province, from the Dominion Government, for the use of the Toronto Asylum for the Insane. The plot of land set apart for prison purposes consists of about 22 acres, and is bounded on the north by the Grand Trunk and Northern Railways, on the east by Strachan Avenue, on the south by the Great Western Railway and the switch line of the Toronto and Nipissing, the Grey and Bruce Railways to Queen's wharf, and on the west by the lands of the Toronto Asylum.

Whether in respect to the location of the Prison, or the site upon which it is being erected, no better selection could have been made. Placed in the metropolis of the Province, it possesses great advantages, not only in the means afforded for the safe and speedy transfer of prisoners from all points, but all the necessary stores, supplies, material for industrial and manufacturing purposes, can be promptly and cheaply received, and manufactured goods at once placed in the best market in the Province.

The advantages of the site in respect to railway communication cannot well be over-estimated, as every railway now entering the City of Toronto can, if necessary, switch into the prison grounds, which, together with its close proximity to water communication, renders it in all respects peculiarly eligible for the location of an Industrial Prison.

The main sewer and the water supply pipes of the Toronto Asylum pass through the prison lot, both of which will be tapped for the purposes of the prison, thus saving a large sum in these two expensive branches of construction; while the elevated position of the buildings overlooking the lake renders the location in all respects healthy, and affords everything necessary to effective sanitary arrangements.

The suggestions and recommendations, in respect to the general plan and style of building, contained in the prefixed report, met with the approval of Government, and were embodied in the plans prepared by the Government architect and engineer.

The buildings are being constructed of white brick, with cut stone caps, sills, quoins and plinth; the main structure and the wings extending from the same will have a frontage of 427 feet, with a depth of 80 feet to the main building, and 53 feet to wings; the workshops will be 200 feet long, 50 feet wide; the dimensions of the warehouse is not yet determined. The whole will be surrounded by a stone wall 22 feet high, and 2 feet in thickness.

Until the prison trades are decided upon, and the required amount of workshop space determined, an accurate estimate of the cost of the prison cannot be given. The appropriation of \$150,000, made by Legislature at its last session, will certainly do no more than finish the buildings; and if it is found necessary to make any considerable addition to the workshop and warehouse, beyond the amount required under the original specifications, the appropriation for buildings may have to be increased.

In addition to the contract already entered into for the main structure, wings, warehouses, and yard walls, amounting to \$129,000, the sum of \$15,000 will be required for the cell gates and the internal iron work of the Prison. I have recommended, for the consideration of the Hon. the Commissioner of Public Works, that, in addition to the amount required to complete the buildings, the following amounts be asked from the Legislature on capital account:—

Furniture and furnishing	\$12,000
Machinery, steam power, and workshop fixtures	25,000
Fencing, leveling and ornamenting the Prison grounds.....	4,000

GAOL STATISTICS of the Province of Ontario, from the 1st of October, 1870, to the 30th of September, 1871.

NAME OF GAOL.	PRISONERS.				NATIONALITIES.							RELIGIOUS DENOMINATIONS.								
	Over 16 years of age.		Under 16 yrs. of age.		Total number of Prisoners.	Number committed first time.	Number committed second time.	Number committed third time.	Number committed oftener.	Canada.	England.	Ireland.	Scotland.	United States.	Other countries.	Roman Catho- lic.	Church of Eng- land.	Presbyterian.	Methodists.	Other Denomi- nations.
	Females	Males.	Females	Males.																
Brantford.....	71	223	0	11	305	214	51	12	28	173	48	54	24	4	2	73	146	30	46	8
Barrie.....	23	140	3	2	168	158	9	5	5	64	31	46	15	8	15	41	80	27	17	13
Berlin.....	3	43		4	50	30	10	5	2	19	5	10	3			18	3	10	6	
Brampton.....	7	30	1	5	43	35	5	1	2	25	5	10	3			11	16	12	4	
Brookville.....	29	114	1	10	154	79	27	16	32	94	9	44	3	4		81	41	11	17	4
Belleville.....	53	89			145	61	28	9	47	78	14	43	8	2	1	64	38	12	24	7
Cayuga.....	19	39	1	5	64	40	8	4	12	31	10	10	2	10		10	20	7	27	
Cornwall.....	3	19		3	26	22	3		1	17		5	3	1		14	5	5	1	1
Cobourg.....	36	81	3	14	134	70	16	11	37	71	26	31	3	3	3	34	48	18	24	10
Chatham.....	12	72		3	99	70	9	7	9	44	4	7	2	39		21	12	7	36	23
Godfrich.....	7	64		2	73	62	7	4	4	33	11	17	12			56	25	25	14	3
Guelph.....	14	131	2	7	154	122	22	6		41	31	52	22	6	2	335	56	69	92	36
Hamilton.....	233	470	8	47	758	273	108	54	323	239	116	277	62	48	16	132	226	17	45	
Kingston.....	124	147	2	12	285	175	49	29	32	100	42	125	16	2		109	71	43	49	23
London.....	70	316	3	23	412	348	47	11	6	167	94	90	23	26	12	15	188	21	5	2
Lindsay.....	4	43	1	1	49	43	2	3	1	22	7	15	2	2	1	6	2	3	6	
L'Orignal.....	1	10			11	10	4	1		11						5	17	6	7	2
Milton.....	4	30		3	37	32	4	1		16	4	16		1		10	15	6	21	4
Napanee.....	6	43		4	53	31	8	1	13	31	10	6		6		286	105	38	18	4
Ottawa.....	143	257	8	43	451	313	68	24	46	239	41	137	22	8	4	10	28	27	10	3
Owen Sound.....	15	61		2	78	65	8	5	5	25	10	21	14	7	1	20	18	15	2	7
Perth.....	8	51		3	62	37	8	2	12	43	4	11	4			6	4	3	7	5
Pickton.....	1	23		1	25	25	4	1	7	13	1	8	1	2		34	7	8	1	3
Pembroke.....	3	50		5	53	49	3	1	23	37	13	13	3	3	3	65	17	10	8	
Peterborough.....	17	73		11	100	57	16	4	23	33	13	44	3	3		17	17	10	22	32
Simcoe.....	8	73	1	9	82	67	18	5	1	50	10	17	4	8	4	12	17	15	22	8
St. Catharines.....	27	89	1	6	126	115	9	4	1	62	13	20	7	14	10	34	47	14	15	11
Sarnia.....	11	112	1	1	130	105	9	1	12	56	14	36	10	14		45	54	15	17	2
Stratford.....	15	57	3	8	83	76	7	7		34	12	20	7	7	3	8	32	15	17	11
Sandwich.....	46	164	1	8	219	183	26	9	1	70	18	31	7	87	6	61	47	13	43	55
St. Thomas.....	3	48		2	53	50	3			22	7	8	8	7	2	4	19	12	10	8
Sault Ste. Marie.....	12	51		1	63	51	1			5	2	1	2			750	733	164	118	22
Toronto.....	575	1156	14	42	1787	1266	258	116	147	457	328	820	91	71	20	3	7	7	1	4
Walkerton.....	5	17			22	21	1	3	6	30	10	9	4		4	11	26	19	11	3
Woodstock.....	3	62		5	70	53	8		1	33	7	15	9	5	1	23	30	11	19	3
Welland.....	16	65		5	86	81	4		3	39	25	27	5	11	3	27	36	24	30	28
Whitby.....	27	107	4	7	145	124	10	5	6	39	25	48	22	1	10	27	36	24	30	
	1642	4586	58	329	6615	4552	883	358	822	2528	983	2139	429	408	128	2472	2249	753	805	336

GAOL STATISTICS of the Province of Ontario, from the 1st of October, 1870, to the 30th of September, 1871.—Continued.

NAME OF GAOL.	PRISONERS MARRIED.		PRISONERS UNMARRIED.		No. of Prisoners who could neither read nor write.	HABITS OF PRISONERS.		Greatest number of Prisoners in Gaol at one time.	No. of Escapes.		No. of insane persons or idiots received during the year.	No. of insane persons or idiots now in Gaol.	No. of Deaths.	No. of Cells in Prison.	Actual cash Revenue derived from labour of Prisoners.	Total Gaol expenditure for food, fuel, clothing, official salaries, and general purposes, including ordinary repairs.	Cost of daily rations per head.	Total Gaol expenditure for years 1869-70.	Cost of Rations per head, 1869-70.	No. of Prisoners, 1869-70.
	Males.	Females.	Males.	Females.		Temperate.	Intemperate.													
Brantford.....	70	5	167	63	48	89	216	31	1	1	5	9	4	27	.....	\$3300 35	14 1/10 c.	\$3300 35	13 c.	88
Barrie.....	63	8	83	14	20	37	131	29	1	1	8	9	2	27	.....	2561 45	11 1/10 c.	3607 07	13	86
Berlin.....	27	.....	20	3	4	23	2	11	.....	.....	4	1	1	24	.....	1769 26	11 1/10 c.	1843 55	12	63
Brampton.....	11	2	21	6	9	22	20	12	1	.....	6	1	1	24	.....	2099 49	11 1/10 c.	1882 94	10 1/2	53
Brookville.....	45	10	73	20	33	27	127	22	.....	.....	6	2	.....	27	.....	2286 75	11 1/10 c.	2038 84	10 1/10	132
Belleville.....	15	7	78	45	28	43	102	20	.....	.....	9	.....	.....	18	.....	2586 00	08	1926 50	10	136
Cayuga.....	18	3	26	17	26	19	45	12	.....	.....	4	.....	.....	12	.....	1941 74	12 1/10 c.	1911 48	25	57
Corwall.....	11	3	12	15	11	15	11	5	.....	.....	6	.....	.....	17	.....	1244 91	12 1/10 c.	1478 25	17	30
Cobourg.....	29	2	65	38	43	37	97	25	.....	.....	8	5	1	24	.....	3000 25	12 1/10 c.	3062 99	15	144
Chatham.....	28	4	53	8	32	61	34	18	.....	.....	3	1	1	26	.....	2197 62	10	2347 10	14	100
Goderich.....	26	2	40	5	13	34	39	12	.....	.....	3	.....	.....	36	.....	1770 75	10	2201 04	10 1/10	84
Guelph.....	58	7	80	9	.....	44	110	17	.....	.....	8	.....	.....	36	.....	2590 00	14	2386 75	13	132
Hamilton.....	167	104	349	138	176	228	530	71	4	.....	6	1	1	30	.....	3819 00	09 1/10 c.	8046 59	11	250
Kingston.....	35	20	122	107	229	34	251	40	.....	.....	8	3	2	53	.....	6125 21	11 1/10 c.	3678 76	9	342
London.....	109	21	230	52	91	190	222	43	.....	.....	17	1	2	43	.....	1925 21	08 1/10 c.	5816 22	10 1/10	348
Lindsay.....	14	3	30	2	7	26	23	14	.....	.....	3	1	.....	18	.....	739 42	25	1186 26	7	12
L'Orignal.....	6	.....	4	.....	4	7	4	4	.....	.....	2	.....	.....	18	.....	1977 02	15	1829 38	15	52
Milton.....	12	1	21	4	8	11	26	9	.....	.....	5	.....	.....	12	.....	703 01	09 1/10 c.	704 33	10 1/10	38
Napanee.....	22	2	25	.....	15	25	28	13	.....	.....	5	.....	.....	12	.....	1940 00	25	1490 00	25	25
Ottawa.....	125	56	170	100	254	189	262	37	.....	.....	12	.....	.....	18	.....	993 96	12	1255 84	10	55
Owen Sound.....	36	12	27	3	.....	25	53	17	.....	.....	12	6	.....	96	.....	4305 92	08 1/10 c.	4475 25	11	393
Perth.....	27	2	27	6	16	23	39	14	.....	.....	6	2	1	18	.....	2645 11	15	2825 81	22	79
Pictou.....	14	1	10	.....	.....	40	4	21	3	.....	1	.....	.....	22	.....	1977 02	15	1829 38	15	52
Pembroke.....	12	2	38	1	33	44	9	21	.....	.....	4	3	1	24	.....	703 01	09 1/10 c.	704 33	10 1/10	38
Peterborough.....	29	12	54	5	25	42	68	16	.....	.....	11	2	.....	21	.....	2293 08	13 1/10 c.	1691 47	13 1/10	93
Simcoe.....	30	4	54	5	25	42	68	16	.....	.....	6	2	.....	21	.....	2199 31	10 1/10 c.	2590 85	16	65
St. Catharines.....	37	19	61	9	30	21	105	26	4	.....	4	2	1	40	.....	2848 49	09 1/10 c.	2505 14	9 1/10	158
Sarnia.....	57	8	61	4	13	31	99	13	.....	.....	4	.....	.....	16	.....	2155 39	20	2056 10	20 3/10	126
Stratford.....	31	11	34	7	61	22	16	16	.....	.....	7	5	2	24	.....	2000 10	08 1/10 c.	2630 97	8 3/10	93
Sandwich.....	64	28	107	20	77	66	153	32	1	.....	4	1	1	34	.....	2521 71	12	2335 90	10	182
St. Thomas.....	18	1	34	.....	15	22	29	10	3	.....	.....	1	.....	16	.....	1846 00	25	1894 91	25	37
Sault Ste. Marie.....	2	.....	10	.....	5	2	10	6	.....	.....	.....	.....	.....	14	.....	1058 12	30	742 56	30	20
Toronto.....	302	140	896	449	377	893	894	159	.....	.....	36	6	3	172	.....	\$820 00	8 1/10 c.	14507 43	8 1/10	1705
Walkerton.....	10	1	7	.....	4	13	9	.....	.....	.....	5	2	1	24	.....	17 30	07 1/10 c.	1740 18 1/2	8 1/10	39
Woodstock.....	30	2	37	1	57	29	41	16	.....	.....	1	1	.....	32	.....	3070 00	16 1/10 c.	2730 00	15 1/2	119
Wendwood.....	25	9	45	7	13	17	19	67	.....	.....	12	.....	.....	48	.....	.....	.....	2757 00	11	101
Whitby.....	42	18	72	13	10	46	99	15	.....	.....	5	1	.....	30	.....	00 75	09	3050 00	9	138
	1657	531	3258	1169	1722	2541	4046	838	15	.....	239	61	29	1149	\$1397 63	\$102,903 61	.....	102,320 02 1/2	.....	6379

Occupation and Calling of Prisoners Sentenced to the several Gaols of the Province of Ontario, year ending 30th Sept., 1871.

NAME OF GAOL.	Agents.	Broom and Basket-makers.	Bar-tenders.	Bricklayers.	Blacksmiths.	Boot and Shoemakers.	Butchers.	Barbers.	Bakers.	Brushmakers.	Bookbinders.	Constables.	Cabinetmakers and Upholsterers.	Carpenters and Joiners.	Carriage-makers.	Constables and Bailiffs.	Coppersmiths.	Coopers.	Clerks, Bookkeepers, and Students.	Doctors, Druggists, and Dentists.	Dressmakers.	Engravers.	Farmers and Yeomen.	Gentlemen.	Gasfitters.	Gardeners.	Harness makers.	Hatters.	Lawyers.	Labourers.	
Brantford.....				1	5	7	2		4			1							1	3	2		1	13				1	1		170
Barrie.....		5		4	4	5	1	2												5				14			1				69
Berlin.....						5		1						3					3					22							27
Brampton.....					3	5								3					2	2	1			4							64
Brookville.....					3	3	8							2						1				6				2	3		64
Belleville.....					4	1		1					1	2						1				9							28
Cayuga.....					1	2		2						1									1	7							24
Corwall.....					1	1							1						2	2	1										11
Cobourg.....					1	5	4		2				1																		62
Chatham.....					1	1		2					3							1				3					3		73
Goderich.....					1	1		1					3												1						24
Guelph.....					1	1		2					6							1				13							69
Hamilton.....					1	17		1					3						5	9				8							24
Kingston.....		4	10		9	17	6	2	3	4			3						1	1			11								209
London.....					3	2							3						4	10				10							40
London.....					3	2							4						4	10				1							232
Lindsay.....					2	8		7					11							1				4							27
L'Orignal.....		1	2			1		1											1					4							5
Milton.....						1		1																1							12
Napance.....					1	1		1																1							35
Ottawa.....					1	10		7					5						10					16							178
Owen Sound.....		2				1		2					1						1					25							8
Perth.....					8	1		1																4							30
Picton.....						1		1																2							14
Pembroke.....						1		1																5							33
Peterborough.....					1	1		1					1						3					10							43
Simcoe.....					3	1		2					1							1				24							36
St. Catharines.....					4	1		3					4						1					6							24
Sarnia.....						1		2					8						4	3				8							46
Stratford.....						3		1					1							6				10							35
Sandwich.....					8			3					1							13				13							72
St. Thomas.....					1	1							1							1				1							41
Sault Ste. Marie.....						1		1																							5
Toronto.....	3	2	3	14	20	40	19	10	12	10	4	1	13	76	5			1	5	46	7			9							666
Walkerton.....					1	1							1							3				6							6
Woodstock.....					1	1		1					1											4							30
Welland.....					3	1							4							1				7							34
Whitby.....					2									2						4				15							95
	12	21	30	28	101	135	73	25	38	15	4	2	39	194	16	1	1	28	114	17	32	8	286	9	3	13	24	10	19	2591	

SEPARATE REPORTS

ON THE

STATE AND MANAGEMENT

OF

THE COMMON GAOLS.

BARRIE GAOL.

County of Simcoe.

This Gaol was inspected on the 14th June, and again on the 19th September, the commitments for the year ending 30th September, were vastly in excess of the corresponding period of 1869-70, as the annexed Statement will show.

	Males.	Females.	Total.
Total number of prisoners committed for the year ending 30th September, 1870.....	73	13	86
Do. do. for the year ending 30th September, 1871.....	142	26	168
Greatest number of prisoners in Gaol for the year ending 30th September, 1870.....			16
Do. do. for the year ending 30th September, 1871...			29

The congregating of a considerable foreign population in the County for the construction of railways, has no doubt contributed very largely to this increase, which is borne out by the return of an increased number of labourers sentenced for drunkenness and disorderly conduct.

At my first visit there were 15 prisoners in custody, and at the last 28, of whom 19 were men and 9 women. On both occasions there were the usual number of idiots and imbeciles in confinement, many of them having been residents of the Gaol for years. Three of this class are found proper subjects for the Idiot Asylum as soon as that institution is ready for the reception of patients; the remaining two are fit cases for a Poor-house. The two children referred to in my last Report as being in Gaol, whose mother is a habitual vagrant and a constant occupant of the gaol, have very properly been removed to other quarters. A prisoner convicted of robbery, whose term of sentence had two months to run, effected his escape on the 12th June last. Having examined into the circumstances connected with it, it appears that the prisoner made his escape when at work beyond the Gaol precincts in charge of the turnkey; the facts of the case were duly reported to the Government. Three insane people have been transferred from the Gaol to Asylums during the year. The attention of the Gaol Surgeon was called, at my last inspection, to the case of a man committed for threatening and abusive language, and who gave evidence of an unsound mind.

The practice that obtains in this County of giving the Gaoler a certain sum, out of which that officer has to pay the turnkey and matron, is open to serious objection, and has a tendency to take the control of the under Gaol officials out of the hands of the Sheriff, who alone is responsible to Government for the safe keeping of prisoners and prison discipline. At the present time the Gaoler receives \$1100 per annum, out of which he pays the turnkey \$200 and the matron \$60 per annum, as well as boarding them. I recommended that this practice be abandoned, and fixed salaries paid to each official.

At both visits, the Gaol and yards were very clean and well kept.

Total commitments for the year 168. Gaol expenditure, \$2,561 45. \$1335 of which sum being for officials' salaries.

BROCKVILLE GAOL.

United Counties of Leeds and Grenville.

Inspection was made of this Gaol on the 20th of April, and again on the 28th of September. At the first visit I met by appointment, a Committee of the County Council, with whom I visited the Gaol, and pointed out its structural defects, viz., the very limited window space, and the height of the window openings from the floor, the solid oak cell doors, which prevent the proper ventilation of the cells and other parts of the building, as well as obstruct the light; also the want of sufficient day room space, which sometimes renders it necessary to keep prisoners locked up in their cells during the whole day. To remedy these defects, I recommended,—

1st. The enlargement of the windows, both in the cells and corridors, and the substitution of iron gates for the solid oak doors.

2nd. To provide additional day room space by the erection of a stone structure at the north-west angle of the present building; the new building to be connected with the old, by using one of the cells for a side corridor.

3rd. The extension of the yard walls to take in more yard space.

The suggestions above indicated met with the approval of the building Committee, and were adopted and acted upon by the Council, and the additions and alterations were immediately placed under contract. The new work was inspected during my visit in September, and as far as it had progressed was found to be of a substantial character, both in respect to material and workmanship.

The Gaol, at both inspections, was extremely clean, with the walls well lime-washed, and the bedding neat and well kept. There were 11 prisoners in confinement at my first inspection, all men, one of them committed as insane, whose removal to the Provincial Asylum was at once recommended. At my last visit there were 18 prisoners in custody, viz.: 10 men, 4 women, and 4 boys under 15 years of age. The evils of improper classification, owing to want of day rooms, were, on this occasion, very apparent. A great number of prisoners of all grades were crowded into the only room available for day-room purposes. There were 154 prisoners committed during the year, being an increase of nearly 20 per cent. over the previous year.

Total Gaol expenditures for the year, \$2,286.75, of which \$1,200 was for officials' salaries, viz.: Gaoler, \$800, Matron, \$100, Turnkey, \$200, and Gaol Surgeon, \$100.

BELLEVILLE GAOL,

County of Hastings.

A very marked improvement has taken place in the condition and management of this Gaol. Two visits were made to it during the year, and on both occasions the corridors, cells, bedding, &c., together with the yards, were in excellent order, with thorough cleanliness prevailing throughout the entire premises. Better discipline was also observable at both visits than on previous occasions, and the classification of the prisoners in the several corridors was being carried out in conformity with instructions recorded in the minute book.

The dark kitchen, so often condemned, has been abandoned, and the corridor of the old Prison is now used for kitchen purposes.

At the first inspection on the 26th May, there were 9 prisoners in confinement, 3 men and 6 women, nearly all committed for vagrancy and drunkenness. At the last visit on the 14th August, there were only 6 prisoners,—4 men and 2 women; both of the women were committed as dangerous lunatics, but, as they had all the appearance of being quite harmless, incurable imbeciles, and not at all proper subjects for an insane asylum, their removal to an asylum was not recommended. Five transfers have taken place during the year from this Gaol to the several asylums for the insane. One of the female prisoners (who was semi-idiotic) gave birth to a child in the Gaol, for which the County Council made provision. 145 prisoners were committed, against 136 for the previous year.

The salary of the Gaoler is \$400 per annum; Turnkey (a new appointment), \$400; Matron, \$200; Gaol Surgeon, \$100. Total Gaol expenditure for the year, \$2,686.75.

BRANTFORD GAOL,

County of Brant.

This Gaol was visited on the 13th April, on which occasion there were 19 prisoners in confinement,—14 men and 5 women; and again on the 8th September, when the number had increased to 24, viz.: 17 men and 7 women. Six of the men were Indians. One of the prisoners had been committed as a lunatic, but had so far been restored to a sound mind, that his discharge from Gaol was recommended.

The cells, corridors, day-rooms, and domestic departments of the prison were, on both occasions, found in a clean, tidy, and well ordered condition.

I found several prisoners, some of whom were sentenced for lengthened periods, occupying cells in the old gaol, although there was plenty of room for the confinement and classification of prisoners in the new Prison. As the cells are close and badly ventilated, and really only fit for dark punishment cells, the abandonment of the building was ordered, except for the confinement of short date prisoners from the police court.

Stables and barns are still allowed to remain in the working yard of this Prison, and the airing yard has also buildings in it which are used for other than prison purposes, as well as being used for a vegetable garden. The action of Government is evidently required to remedy this, as the County Council neglects to take action in the matter.

305 prisoners passed through this Gaol for the year ending 30th September. One escape took place but the prisoner was shortly afterwards recaptured.

The total Gaol expenditure for the year was \$3,351.38, \$1,450 of which was for salaries, viz.: Gaoler, \$750; Turnkey, \$450; Matron, \$100, and Gaol Surgeon, \$150.

BERLIN GAOL,

County of Waterloo.

Inspection was made of this Gaol on the 21st June, when there were 4 prisoners in custody—two men and two women—one of the latter a lunatic, who being an urgent case and susceptible either of cure or improvement, her removal to London Asylum was recommended and took place. The male prisoners were engaged in teasing hair for mattresses.

The Gaol was again visited on the 24th October, when the same number of prisoners were found in confinement—three men and one woman. Two of the number were waiting trial for house-breaking and robbery, and two were under sentence. At both visits every part of the Gaol, together with the yards, was in the most admirable state of cleanliness and order, and the rules and regulations well attended to.

51 prisoners passed through the Gaol during the year. The total expenditure for maintaining the Gaol was \$1,769.29, which includes the salary of the Gaoler, \$500; Turnkey, \$400; Matron, \$100, and Gaol Surgeon, \$200, per annum.

BRAMPTON GAOL,

County of Peel.

I visited this Gaol on the 2nd May, and again on the 25th October, on which occasions there were, respectively four and six prisoners in confinement—all men. At my last visit three of the prisoners were under sentence for long periods and for very serious offences. A man committed as insane, who has been in Gaol for two years, should be removed to a private house as he is not a proper subject for a Lunatic Asylum, being a quiet, harmless, weak-minded old man.

The attention of the County authorities was directed in my minutes of inspection to the necessity of providing lodgings in the Gaol for the Turnkey. Under the present system

the Gaoler is left alone in the Prison during the whole night and a portion of the day. Prisoners are still taken beyond the prison limits to work, as previously reported.

The entire premises at both inspections were in a very creditable condition of cleanliness and order. Total number of prisoners committed during the year, 43. Gaol expenditure, including salaries, \$2,099.49. Gaoler, \$500; Turnkey, \$345; Matron, \$100; Gaol Surgeon, \$50, per annum.

CAYUGA GAOL.

County of Haldimand.

I inspected this Gaol on the 21st June, when there were 5 prisoners in confinement. One of the number was a man committed as insane, whose discharge from custody had been recommended at my previous visit, as he then appeared to have been restored to a sound mind; but as evidence was afterwards furnished that his release would be accompanied with some danger, (having been frequently committed during the past seven years as a dangerous lunatic), the examining authorities thought it desirable that he should be placed under Asylum supervision and treatment; his transfer to London Asylum was accordingly recommended, and shortly afterwards took place. In addition to this case, four transfers have taken place from this Gaol to Asylums during the year.

This Gaol is at all times kept in the best possible order, and was at my visit admirably clean throughout.

The board fence, surrounding the yards, having become very dilapidated, I recommended its reconstruction, when the work was immediately placed under contract.

The new heating furnaces which were placed in the basement in the early part of last winter, thoroughly warm the building at a great saving in fuel.

The prisoners' rations are still furnished by the Gaoler, at a cost to the County and Government of 25c per day for each inmate. Although the matter has repeatedly been brought under the notice of the County authorities, the objectionable practice still continues. I would therefore recommend, that, in future, the rations of prisoners, whose maintenance is chargeable to the Province, be paid at the average cost of this service in other Gaols.

The total number of prisoners received for the year ending 30th September, 1871, was 64, and the entire cost of maintaining the Gaol for that period was \$1,941.74, \$1,020 of which sum was paid for official salaries, viz.: Gaoler, \$500 per annum; Turnkey, \$300 per annum; Matron, \$80 per annum, and Gaol Surgeon, \$140 per annum.

CORNWALL GAOL.

United Counties of Stormont, Dundas and Glengarry.

Only 26 prisoners passed through this Gaol during the year ending 30th September, six of whom were committed as insane, and were removed to Lunatic Asylums, as soon as the papers required under the Statute were placed in the hands of the Provincial Secretary. At my inspection on 21st April the Gaol was entirely clear of prisoners.

The additions, alterations and repairs to the Prison were completed in the early part of the year at a cost of \$11,000, and an inspection having been made of the work, it was found, both in respect to material and workmanship, to be of the most substantial kind, with the requirements of the Act in respect to structural and sanitary arrangements fully complied with. The Gaol was accordingly accepted under the provisions of "the Inspection Act" as the Gaol for the United Counties of Stormont, Dundas and Glengarry.

The Expenditure for Gaol purposes for the year amounted to \$1,244.91, \$1,050 of which sum was for officials' salaries, viz.: Gaoler, \$740 per annum; Turnkey, \$200 per annum; Matron, \$60 per annum; Surgeon, \$50 per annum.

COBOURG GAOL.

United Counties of Northumberland and Durham.

At my first visit to this Gaol, on the 27th May, there were 9 prisoners in confinement,—6 men and 3 women, and when again visited on the 13th September, the number had increas-

ed to 23, viz.: 15 men and 8 women—many of them charged with, or under sentence for, the most serious offences known to the law. Two prisoners (one of them waiting trial for horse-stealing, and the other for want of sureties to keep the peace,) gave strong evidence of being of unsound mind. An examination by the proper authorities, with a view to their transfer to an asylum, was recommended, and their removal immediately afterwards took place. Two of the women were also committed as insane, and were recommended for removal to Rockwood Asylum. Complaint was received from a prisoner confined to his bed, that the Gaol Surgeon did not visit him. On investigation, I found that there was no foundation for the complaint; but to prevent a recurrence of such charges, I directed the Gaol Surgeon to record his visits to the Gaol, as well as his directions to the Gaol officials, in a book to be kept for that purpose in the Gaol office.

At both inspections, the corridors, cells, and domestic departments of the Prison were in excellent order, and thoroughly neat and clean throughout.

The cost of prisoners' rations has been reduced from 15cts. to 12½cts. per day for each prisoner.

Five lunatics have been removed during the year.

Total number of prisoners received during the year, 134. Cost of maintaining the Gaol, \$3,000.25, which includes the Gaol officials' salaries, viz.: Gaoler, \$800; Turnkey, \$500; Matron, \$200; Surgeon, \$80.

CHATHAM GAOL,

County of Kent.

Inspection was made of this Gaol on the 28th March, on which day there were 9 prisoners in custody,—8 men and 1 woman; four of the men and the woman were coloured persons, the last named a harmless idiot, only in want of a little care and attention, although committed as a dangerous lunatic. I visited the Gaol again on the 19th August, and found the same number of prisoners in confinement, all males, and six of them coloured. The officials were cautioned to keep a close watch upon one of the prisoners then in custody, who had, a year previously, effected his escape from the St. Catharines Gaol, and, being a most ingenious Gaol breaker, would undoubtedly make another attempt.

Complaints were received from two prisoners of the insufficiency of the diet. On examining into the matter, I found that the rations were furnished in accordance with the prescribed regulations as respects quantity and quality, but not in the manner of providing them, the gaoler being paid a certain sum (14 cts.) for each prisoner's daily rations. Although this amount is not much in excess of what the service would cost if obtained in the proper manner; still I strongly advised exact compliance with the regulations, if for no other reason than that, so long as the gaoler was pecuniarily interested in this branch of the Gaol service, complaints of the kind examined into would be preferred, although, as was the case in this instance, without the slightest foundation.

At both visits the Gaol was scrupulously clean and neat in every department, with the discipline and general management all that could be desired.

Total cost for the year, \$2,497.62, including officials' salaries, for which the following amounts are paid:—Gaoler, \$559.50; Matron, \$209.50; Turnkey, \$309.50; and Gaol Surgeon, \$150.

GODERICH GAOL,

County of Huron.

This Gaol was inspected on the 30th May, and found in a neat, clean, and orderly condition throughout. I passed through the various corridors at night, after the prisoners had been locked up, and found the ventilation exceedingly good, and the cells generally free from bad odours.

The structural defects of this Gaol, referred to in previous reports, have not yet been remedied.

There were six prisoners in custody on the day of inspection, all men.

A prisoner committed for want of sureties appeared to be weak-minded, if not quite

idiotic, and another gave evidence of mental derangement. The Gaol Surgeon was requested to report upon his condition.

The Gaol officials were cautioned not to take prisoners, under sentence for serious offences, into the outer wood yards, it being quite unsafe.

73 prisoners were committed during the year, 3 of whom were insane.

Total Gaol expenditures for the year, \$1,770.95. Officials' salaries: Gaoler, \$550; Turnkey, \$400; Matron, \$100; Surgeon, \$120.

GUELPH GAOL.

County of Wellington.

Inspection was made of this Gaol on the 22nd May, and 22nd June. The removal of the oak partitions, and the substitution of the sand with brick walls arches, and cut stone jambs with other alterations to the Gaol, were entirely completed at my first visit. The Gaol is now rendered perfectly secure, and is very much improved both in its sanitary, and structural requirements, and enables a thorough classification of prisoners to be made.

On both occasions the Gaol and yards were in good order, and well kept.

There were in the Gaol on the 22nd May, 9 prisoners, all men; one, a lunatic of very filthy habits, whose removal to Toronto Asylum I recommended, and which immediately took place.

All the sentenced male prisoners were engaged cutting wood in the working yard.

At my second visit there were six prisoners in confinement,—all males. one, sentenced to the Penitentiary, was then waiting removal; another was waiting trial on a charge of murder.

154 prisoners were committed to the Gaol during the year, of whom 8 were insane. The Gaol expenditure for the year, exclusive of fuel, was \$2,590; \$1250 of which was for officials' salaries, viz., Gaoler, \$500; Turnkey, \$350; Matron, \$200; Gaol Surgeon, \$200.

HAMILTON GAOL.

County of Wentworth,

Statutory inspection was made of this Prison on three occasions during the year, viz., 7th March, 10th April, and 6th September.

At every visit the Gaol was found in a very creditable condition of order and cleanliness, and, as far as its structural defects and overcrowded state would permit, the discipline of the Prison was very satisfactory; although it must be admitted that in a building wanting in all the requirements of a Gaol, effectiveness of administration, or discipline cannot be looked for.

On the 10th April there were 50 prisoners in confinement, 33 men and 17 females. One of the females being insane, her removal to an Asylum was recommended, and at once took place. Of the males, 12 were committed for drunkenness and disorderly conduct, 7 for vagrancy, 6 for larceny, 3 for assault, and the remainder for more serious criminal offences.

On the 6th September, there were 55 prisoners in Gaol, 38 men and 27 women; the proportion of females in this instance being unusually large. As there is but one corridor for females, with only ten cells in it, any attempt at classification would be useless. The only work-room or day room for females is the Gaol corridor. Under these adverse circumstances, the matron deserves the greatest credit for the good order and discipline that prevailed in the female department, as well as for the efforts made by her to keep the prisoners employed. 17 of the male prisoners were engaged cutting wood in the yard.

Complaints were received from 3 prisoners that they had not been allowed to go out, for several days, for airing, but on enquiry I found that they had attempted to escape, and were being closely confined for punishment. Three of the females were of unsound mind, one of whom was at once transferred to Rockwood Asylum,—the other two were not proper subjects for an Asylum.

Owing to the escape of 4 prisoners from the Gaol during the year, an investigation was held into the circumstances connected therewith, when it was found, that in every instance the escapes were attributable to the insecure state of the working yard, which is only sur-

rounded by a board fence, and is rendered still more insecure by the erection of a wood shed in the yard, as well as by piling wood against the fence. In one instance, want of supervision, if not gross carelessness, was proven. The minutes of investigation were forwarded to the Honorable the Provincial Secretary, with my Report thereon, and the Gaoler was requested in future to exercise the greatest caution to prevent escapes, not only by personal supervision, but in the enforcement of stringent rules respecting the duties of guards.

756 prisoners passed through this Gaol during the year, which is a little under the commitments of the previous year. 68 of this number elected to be tried, for the offences for which they were committed, at the Interim Sessions Court.

The total cost of maintaining the Gaol for the year was \$9,501 84; of which amount \$2,475 was for official salaries, viz., Gaoler, \$750; 2 Turnkeys at \$425 each, and one at \$375; Matron, \$300; Gaol Surgeon, \$200 per annum.

KINGSTON GAOL.

County of Frontenac.

This Gaol was inspected on the 2nd June, and again on the 2nd October. At both visits every department of the Prison was found in the most admirable order, and scrupulously neat and clean throughout; with the general management of its affairs, as well as the discipline of the prison, in a very satisfactory state.

Owing to some quality in the building stone, the dark punishment cell was found in a very damp state. I recommended that it should be floored and lined with plank.

The County Council still neglects to provide Gaol clothing for the prisoners. At my last visit, there was evidence of some defect in the drains. An examination was recommended.

On the 2nd June there were 30 prisoners in custody; 16 men, and 14 women. One of the women was committed as a dangerous lunatic, but as she appeared to be a quiet, harmless creature, and not a proper case for an Asylum, I recommended her discharge under the provisions of the Statute.

At my inspection in October, I found 31 prisoners, 21 men and 10 women. One of the men had just been committed for insanity and was at once removed to Rockwood.

One of the females, a girl of 15, was sent to Gaol "*under circumstances that denote a derangement of mind*;" but as both her appearance and manner denoted *congenital idiocy*, her transfer was not recommended, although she would be a proper subject for the Idiot Asylum when that building is completed.

285 prisoners were committed to this Gaol for the year ending 30th September, being 35 commitments in excess of the previous year; 8 of the number were lunatics.

Two prisoners (men) were hanged on the 14th December last, one for murdering a guard in the Penitentiary, and the other for poisoning his wife.

Gaol expenditure for the year, \$3,819, \$1,150 of which was for officials' salaries, viz.: Gaoler, \$700; Turnkey, \$200; Matron \$150; Gaol Surgeon, \$100, per annum.

LONDON GAOL.

County of Middlesex.

Inspection was made of this Gaol on the 27th March, there being on that day 34 prisoners in confinement; no insane persons were then in custody. I conversed with all the prisoners and received no complaints.

The corridors, cells and other departments of the Gaol, as well as the yards, were in as good order as the condition of the building would permit, but in a Gaol so deficient in all the requirements of a modern Prison, perfect cleanliness or order cannot be looked for.

The attention of the County authorities having repeatedly been called to the structural defects of the building, but no notice having been paid to the remonstrances, I sent a copy of my report upon the condition of the Gaol to the Clerk of the County Council on the 31st March, for submission to the Council, as required by the Inspection Act, requesting that a Special Committee be appointed to confer with me. The Committee was appointed, and a meeting took place on the 10th June, on which occasion I passed through the Gaol and

pointed out the defects to the members of the Committee, of which the following is a detailed statement:—

1st. The solid oak doors, small windows and brick floors, which prevent, in two corridors proper ventilation, obstruct the light and attract the damp to such an extent that they are quite unfit for the confinement of prisoners. The Gaol officials were notified not to use them for that purpose.

2nd The condition of many of the cell doors and locks, which, from the settling of the building, cannot be opened.

3rd. The dilapidated condition of the floors, ceilings and partitions throughout the building, and the refuge afforded for bugs and vermin in the plank partitions.

4th. The insufficient supply of water for sewerage and other purposes, which, together with the entire obstruction of the south drain from the building, and the bad condition of the water-closets, render the Prison liable at all times to be scourged by typhoid fever.

5th. The insecurity of the Prison through faulty construction in some of the water-closets.

6th. The insecurity of the working yard, and the means afforded prisoners of communicating with the outside, owing to the low walls and open gate in close proximity to a main thoroughfare.

I regret to say that up to the present time no action has been taken by the County Council to remedy these serious defects, and from all appearances it is very questionable if anything will be done, until the provisions of the Inspection Act are put in force through the Courts of Law.

An official visit was again paid to the Gaol on the 16th August, on which occasion there were 38 prisoners in custody, 22 men and 16 women; four of this number were lunatics, and all of them being proper subjects for an Asylum, their removal to the London Institution was recommended, and immediately took place. At this official visit no less than three prisoners were waiting trial, charged with the crime of murder. The practice of allowing so many visitors to enter the Gaol merely for the purpose of satisfying idle curiosity, was attended with such bad results, both to the prisoners and prison discipline, that the Gaol officials were instructed to refuse admission to all but prisoners' relations and counsel.

No record of the Gaol Surgeon's visits to the Gaol having been kept, the Sheriff was instructed to furnish a book for that purpose.

Total number of prisoners committed to this Gaol for the year ending 30th September, 412; of whom 339 were males and 73 females.

Gaol expenditure, including officials' salaries, \$6,125.21. The officials, and salaries paid them, were as follow: Gaoler, \$800; Turnkey, \$456.25; Matron, \$410.60; two Watchmen at \$410.60 each, and one night Watchman at \$150; Gaol Surgeon, \$150, per annum.

LINDSAY GAOL.

County of Victoria.

I visited this Gaol on the 8th March, and 10th October. On the first occasion I was accompanied by Mr. Strickland, architect, who had been engaged by the Public Works Department to prepare plans, specifications and estimates, and by the County Council, to supervise the alterations and repairs agreed upon between the Council and myself. On that occasion there were 9 prisoners in custody, 5 men and 4 women; one of the last named had been sent to Gaol as a lunatic, but had so far recovered that I recommended her discharge. All the sentenced male prisoners were engaged in cutting wood, a quantity of which is purchased every year by the Council, cut and split by the prisoners, and sold to the inhabitants of Lindsay.

I directed attention to the scant supply and poor quality of the blankets and bedding in use in the Gaol.

At my visit on the 10th October there were only 4 prisoners in Gaol, 3 males and one female, the last mentioned an insane person. As her husband was possessed of property, her transfer to London Asylum, as a paying patient, was recommended, and at once took place.

An inspection was made of the alterations in progress in the Gaol, when the work, as far as it had progressed, was found to be substantial and well done. In consequence of the repairs the Gaol and yards were somewhat in disorder.

Number of prisoners committed during the year, 49. Expenditure incurred in maintaining the Gaol, \$1,265.21, including officials' salaries, which are as follow: Gaoler, \$400; Turnkey, \$300; Matron, \$100; Gaol Surgeon, \$80, per annum.

L'ORIGINAL GAOL.

United Counties of Prescott and Russell.

This Gaol was inspected on the 14th July, and for the first time on the occasion of a statutory visit, a prisoner was found within its walls,—a man committed for an assault.

Every part of the Gaol was neat, clean, and well kept.

Only 11 prisoners were received during the year, two of whom were insane.

\$739.42 was expended in maintaining the Gaol for the year, including salaries.

The Gaoler receives \$360; Matron, \$40; and the Gaol Surgeon \$40 per annum.

MILTON GAOL.

County of Halton.

Inspected this Gaol on the 8th August, and with the exception of two cells, I found the entire premises, including the yards, in a very clean and orderly state.

The ventilation of some of the cells, owing to the small windows, and close oak doors, was very bad.

I found 5 prisoners in Gaol, 3 men, and 2 women; both of the women being insane, their removal to an Asylum was recommended, and immediately took place.

One of the men was also committed as a vagrant and lunatic, who did not appear to be an urgent case, but as the examining authorities appeared to think that his discharge from custody would be attended with some danger, his transfer to Toronto Asylum was recommended.

I directed the attention of the County authorities to the defective internal arrangements of the Gaol, which not only prevent a proper classification of the prisoners, but are even quite inadequate for a proper separation of the sexes. On the occasion of my inspection, I found male prisoners holding conversation with the insane women, both being allowed to occupy the same corridor,—although the females were confined to their cells. As this condition of things, which cannot but have a most demoralizing effect, and is entirely at variance with Gaol regulations, required immediate action, I at once forwarded a copy of my Report upon the state of the Gaol, to the Clerk of the County Council, requesting, that in accordance with the provisions of the Inspection Act, a Special Committee of the Council be appointed to confer with me, with a view to making such additions and alterations to the Gaol as are required. I have since been advised of the appointment of a Special Committee, and a meeting will shortly take place.

37 prisoners were committed to this Gaol during the year. Gaol expenditure, \$1,219 81, including officials' salaries, viz., Gaoler, \$400; Turnkey, \$300; Matron, \$40; Gaol Surgeon, \$80 per annum.

NAPANEE GAOL.

United Counties of Lennox and Addington.

I inspected this Gaol on the 12th August, and again on the 3rd October; at both official visits the Gaol was exceedingly clean and well ordered, and sufficiently furnished in respect to bedding, &c., for its requirements.

The attention of the County Council was called to the state of the yard walls, which require pointing outside.

At my first visit there were 5 prisoners, or rather inmates in custody, for with the exception of one man committed for drunkenness, all the rest were vagrants afflicted with some bodily disease, which rendered them proper subjects for a Hospital, and improper subjects for a Gaol.

The irregular mode of committing this class of prisoners was brought to the notice of the civil authorities.

There were six in prisoners Gaol at my visit in October, 3 of whom were vagrants.

A death occurred in the Gaol in September.

Four insane persons committed to the Gaol were awarded Asylum accommodation during the year.

Total number of commitments, 53; Gaol expenditure, \$993 96,—\$775 being for salaries of officials, as follows: Gaoler, \$400; Turnkey, \$200; Matron, \$100; Gaol Surgeon, \$75.

OTTAWA GAOL.

County of Carleton.

Statutory inspection was made of this prison on the 18th April, and again on the 26th September. On the first occasion the various corridors and cells, as well as the other parts of the building were in a most creditable condition of cleanliness and order. At my official visit in September, owing to workmen being engaged in the reconstruction of the steam heating arrangements, the building was not in its usual state of order.

Notwithstanding the warning addressed to the County authorities in 1868, on the occasion of my first visit to the Gaol, of the danger of having a boiler in the basement of the building for generating steam for heating purposes, the risk attending which was very much increased by having prisoners attend it in place of a proper engineer, the boiler was allowed to remain until an explosion took place last winter, which very fortunately, was unaccompanied by loss of life or injury to the inmates of the building. The Garth system of heating, on the hot water plan, has now been adopted by the County Council, and at my last visit to the Gaol the boilers and pipes were being placed in the building.

I brought under the attention of the building Committee at my April inspection, the desirability of erecting the walls of the working yard, then being enclosed, at a distance of about 30 feet from the public street, not only to prevent prisoners from having communication with the outside, but also to give a means of ornamenting the front grounds. I regret that the suggestion did not meet with the approval of the County Council; as the safe keeping of the prisoners, and the appearance of the building would have been much improved thereby.

There were 28 prisoners in confinement on the 18th April, 17 males and 11 females,—one of the females, a girl of 15, was evidently idiotic, but as it was stated that she possessed dangerous proclivities, her transfer to Rockwood was recommended and immediately took place. Two of the males were also committed as insane, and were immediately removed to the Asylum.

I was present at the serving of the prisoners' dinner rations, which consisted of 6 oz. of meat without bone, $\frac{1}{2}$ lb. bread, $\frac{1}{2}$ lb. potatoes with salt and water. The rations in this Gaol are now purchased by contract, and served strictly in accordance with the regulations, and cost about 9c. daily for each prisoner.

At my visit to the Gaol on the 26th September, there were 27 prisoners, viz., 18 men and 7 women,—for the first time at Statutory inspections, I found the Gaol clear of insane persons.

Before the closing up of the work then in progress to the Gaol and yards, a few alterations and repairs were recommended, particularly the reconstruction of the drain from the main building which evidently required attention.

451 prisoners passed through the Gaol for the year ending 30th September, 1871; during which period the expenditure of the Prison amounted to \$——, which includes officials' salaries, viz., Gaoler, \$800; 1st Turnkey, \$450; 2nd Turnkey, \$400; Matron, \$200; Gaol Surgeon, \$100 per annum.

OWEN SOUND GAOL.

County of Grey.

I visited this Gaol on the 23rd June, on which occasion there were 9 prisoners in confinement, 7 men and 2 women. One of the women has been an inmate of the Gaol for upwards of 15 years, although committed as a person incapable of taking care of herself, she is now perfectly quiet and harmless, and could be much better cared for in a private house;

the County Council or the Township Council of the place from which she came, were requested to make provision for her in this manner. The same remarks apply to a man committed as a vagrant, whose physical condition unfits him for Gaol residence. Another man was found on the railway track in 1869, with both his feet frozen and was committed as a lunatic; his removal to a Lunatic Asylum was not recommended, as he has all the appearance of being semi-idiotic, and whose mental condition could not be improved by Asylum treatment. It is, however, very desirable that these three inmates of the Gaol should be removed therefrom, as the corridors and cells do not admit of a proper classification of criminal prisoners. Since my last visit four additional committals of persons said to be insane have been made, but as no applications have been received for their transfer to an Asylum, I take it for granted that their insanity is of the same character as the cases above described.

Every department of the building was in a very creditable state of cleanliness and order.

The insufficient supply of water furnished for Gaol purposes was brought to the notice of the Council, with a request that steps be at once taken to provide an abundant supply.

In accordance with a recommendation made at my previous visit, the prisoners' rations are now furnished in conformity with the prescribed regulations, and although the new system has only been in operation for a part of the year, it has already had the effect of reducing the cost from 22c. per day to 15c. for each prisoner; a fair trial extending over the full year will doubtless reduce the cost to 10c.

Total commitments for the year 178, which is more than double the number committed the previous year.

Gaol expenditure, \$2,654, which includes officials' salaries, as follow,—Gaoler, \$700; Turnkey, \$500; Matron, \$250; Gaol Surgeon, \$400.

PERTH GAOL.

County of Lanark.

This Gaol was visited on the 19th April, when there were 6 prisoners in confinement, 4 of them old, infirm, pauper vagrants, respectively aged 88, 86, 84 and 74. As some of them are quite helpless and bed-ridden, their care is attended with considerable trouble, which might better be performed by other than prison officials; as it is they are well cared for, and are in possession of as many comforts as can be extended to them under the circumstances.

Every part of the Gaol and yards were exceedingly clean and in perfect order.

The condition of the soft water tank was brought to the notice of the County Council.

62 prisoners were committed during the year ending 30th September, and the cost of the Gaol for the same period was \$1,977 02; of which amount \$1,205 was for salaries. The Gaoler receives \$600; Turnkey \$365; Matron \$160; and the Gaol Surgeon \$80 per annum

PICTON GAOL.

County of Prince Edward

I visited this Gaol on the 27th February, and again on the 11th August. At my first inspection, not a single prisoner was found within its walls, and an examination of the Gaol register, revealed the fact, that it had enjoyed the enviable reputation of being unoccupied for nearly a month. At my second visit, I found a boy under 12 years of age in custody, charged with larceny.

The number of commitments to this Gaol for the year ending 30th September, was singularly small, viz., 25. When it is considered that the Gaol is located in a town of 2500 inhabitants, the fact is still more remarkable. In view of this state of things, the Sheriff was directed to dispense with the regular services of a turnkey, but when occasion required, temporary assistance was to be employed.

At both visits, the Gaol and yards were clean, neat and well ordered.

Number of prisoners committed, 25. Cost of maintaining the Gaol for the year ending 30th September,—\$703 01, which includes officials' salaries, viz., Gaoler, \$400; Turnkey, \$191 66; Gaol Surgeon \$30.

PEMBROKE GAOL.

County of Renfrew.

The commitments to this Gaol for the year ending 30th September were over 100 per cent greater than the previous year, as follows:—

	Men.	Women.	Total.
Total number committed for the year ending 30th September, 1870.....	24	1	25
Do for the year ending 30th September, 1871.....	50	3	53

At my official inspection on the 16th June, 10 prisoners were in confinement, no less than 4 of whom were committed as dangerous lunatics. Whatever may have been their mental condition when they were first placed in custody, it was very clear, at the time of my visit, that at least two of them were quite harmless chronics, who could not be benefitted by Asylum treatment, while another, both from his appearance and manner was semi-idiotic; two of them only require a little kindness and watching to be properly taken care of in a private house, where they could make themselves very useful; the remaining one was recommended for transfer to Rockwood Asylum.

Only two of the prisoners in custody at my visit were committed for criminal offences; one, an Indian from Lake Nipissing.

The cells and corridors were in an exceedingly clean and orderly state, but the working yard required cleaning up.

Although the attention of the County authorities has been repeatedly called to the violation of the dietary regulations, through which the Gaoler receives 25c. for the daily rations of each prisoner, no heed is paid to the remonstrance. I have now to recommend that the rations of Government prisoners be paid for at the average cost of the service in other Gaols.

Total cost of maintaining the Gaol for the year \$1,930 00, including salaries; Gaoler, \$500; Turnkey, \$260; Matron, \$50; Gaol Surgeon, \$60.

PETERBOROUGH GAOL,

County of Peterborough.

This Gaol was inspected on two occasions during the year,—8th March and 10th October,—when there were respectively 7 prisoners,—6 men and one woman; and 8 prisoners,—5 men and 3 women,—in confinement. At my first visit, I found the woman referred to in my last report, who, in passing through the Province on her way to the United States, had become insane, and was committed to Gaol. Her removal to London Asylum was recommended. One of the men, also sent to Gaol as a lunatic, was also removed to Toronto Asylum. At the second inspection, a female who was very noisy and violent, and has several times been sent to Gaol for insanity, was recommended for removal to Rockwood.

The Gaol, on both occasions, was thoroughly clean, neat and orderly, and the management of its affairs very satisfactory. The County Council at all times gives prompt attention to suggestions, with a view to keeping the building in a proper state of repair.

The practice that, in some instances obtains here, of keeping vagrants in continuous confinement, by placing a new commitment in the hands of the sheriff before the expiration of the current sentence, is certainly not sanctioned by the provisions of the Vagrant Act, however humane the intention of the committing magistrate may be.

100 prisoners passed through the Gaol during the year. The expenditures for Gaol purposes amounted to \$2,293.68, a considerable sum having been expended in repairs, and \$1,020 of the amount was for officials' salaries, say, Gaoler, \$500; Turnkey, \$300; Matron, \$100; Gaol Surgeon, \$120 per annum.

SIMCOE GAOL,

County of Norfolk.

This Gaol was inspected on the 20th June, there being on that day 7 prisoners in custody,—6 men and 1 woman. One man committed for attempt at suicide, by drowning, and

another for setting fire to a house, were evidently insane. An examination was recommended, when certificates of insanity were granted, and their removal to London Asylum shortly after took place. The requirements of the Act in respect to the Statutory certificate, in another case, not having been complied with, his removal was not recommended.

The Gaol and yards were admirably clean and well kept throughout. The stoves formerly in use for heating purposes, have been removed, and hot air introduced, with good results, both in respect to the efficiency of the service, and economy.

An alarm indicator, communicating with each corridor, has been placed in the entrance hall. The County Council deserves the greatest credit for the interest it takes in gaol matters, and the attention paid to the state of the building.

At my previous visit, I found that a contractor was being paid 17 cts. for each prisoner's daily rations, a practice which I strongly recommended to be discontinued. The regulations respecting the dietary were put in force on the 1st June last, and the present cost is now only 10 cts.

The commitments for the year ending 30th September, are about 50 per cent. in excess of the previous year, viz.: 93 against 53.

Gaol expenditures, \$2,119.31, \$1,080 of which amount was for officials' salaries: Gaoler, \$500; Turnkey, \$300; Matron, \$200; Gaol Surgeon, \$80 per annum. *

SARNIA GAOL,

County of Lambton.

Inspection was made of this Gaol on 4th May, there being on that day only three prisoners in custody, committed, respectively for assault, passing counterfeit money, and for contempt of court. Every department of the Gaol was in excellent order.

The infraction of the dietary regulations, referred to in previous reports, still continues in this Gaol, through which the gaoler receives 20 cts. per day for the rations of each prisoner. As every remonstrance addressed to the County authorities to abandon the practice has failed to effect a change, I would now recommend that the rations of criminal prisoners, maintained by the Province, be paid for at the average cost of the same service in Gaols that comply strictly with the regulations in this respect, viz.: 11 cts. per day for each prisoner.

130 prisoners were committed during the year, 4 of whom were insane persons.

The Gaol expenditure for the year amounted to \$2,155, \$1,216 of which amount was for officials' salaries, viz.: Gaoler, \$600; Turnkey, \$400; Matron, \$136; Gaol Surgeon, \$80 per annum.

SANDWICH GAOL,

County of Essex.

The old Sandwich Gaol,—which, in respect to construction and arrangement, was one of the worst in the Province,—has at last been abandoned. The new Gaol, which is erected on the lot immediately adjoining it, was taken possession of by the Gaol officials in December last. At my official visit on the 28th March, an inspection was made of the building and its surroundings. The outside walls are of solid blocks of freestone, of great size, lined inside with brick; the corridors and cell floors are stone flagged; the iron work at all the openings is well made and strong; and the entire building, both in respect to material and workmanship, is of the most solid and substantial character, and is surrounded by a good stone wall of sufficient height. The old Gaol, with which the new building is connected, has been remodelled, and now gives space for a Prison kitchen, store-rooms, and Matron and Turnkey's quarters. Before accepting the Prison, in conformity with the provisions of the Act, I called the attention of the County authorities,—

1st. To the limited space enclosed for the female airing yard.

2nd. The failure of the heating arrangements placed in the building.

3rd. The want of ventilation in the dark punishment cell.

The Council were requested to provide the regulation bedsteads for the cells.

Instructions were also given to prepare and serve the Gaol rations in strict conformity with the regulations, which has not been the case in this Gaol in the past.

There were 13 prisoners in custody at my first visit,—9 males and 4 females. No less than 11 of the number were coloured persons, and 5 were youths under 16 years of age. The classification of the prisoners, owing to the upper corridors not being quite finished, was very bad, and for the same reason the corridors were not as clean and orderly as could be desired. At my inspection on the 4th May, I found 12 prisoners,—7 men and 5 women,—5 of the number being coloured. The Gaol, on this occasion, was far from being in a neat or clean state, and the officials were informed that the rules in this respect must be strictly enforced.

The erection of a higher frame division fence between the male and female yards, was recommended.

An escape took place in December, which was attributable to the unfinished state of the Gaol.

219 prisoners were committed during the year, being 37 more than the previous year.

The expenditure for the year was \$2,521.71, including the salary of the Gaoler, \$450; Turnkey, \$350; Matron, \$182; Gaol Surgeon, \$200 per annum.

ST CATHARINES GAOL,

County of Lincoln.

This Gaol was inspected on the 10th April, and again on 7th September. On the first occasion, the entire premises were in an excellent state of cleanliness and order, but at the September inspection, some of the cells in the male corridors were not as neat as could be desired, with bread lying about on the windows and seats.

The practice of serving the whole bread rations of the day in the morning, was condemned, and instructions given to serve out only one ration at a time.

There were 15 prisoners in custody on the 11th April,—11 men and 4 women, 3 of whom were committed as lunatics, but as the papers required under the Statute had not been forwarded to the Provincial Secretary in one case, and in another, the subject was found to be an idiot, only one transfer,—that of a female,—was recommended.

Examination was made into an escape that took place from this Gaol, and report thereon made to Government.

Iron plates have been placed on the cell gates, to prevent prisoners from tampering with the locks, which, with proper supervision on the part of the officials, will effectually prevent escapes in the future.

At my second official visit, there were 21 prisoners,—16 men and 5 women,—in Gaol.

One man, committed as a lunatic, had so far recovered, that his discharge, under the provisions of the Statute, was recommended.

Complaints were received from several prisoners, of the dietary. The officials were instructed to carry out the dietary regulations in their entirety; several deviations from the rules were in existence.

A punishment book, in which shall be recorded all punishments given to prisoners, was ordered to be opened.

Total number of prisoners received during the year, 126.

Gaol expenditure, \$2,848.49, \$1,480 of which being officials' salaries, viz.: Gaoler, \$600; 1st Turnkey, \$360; 2nd Turnkey, \$240; Matron, \$80; Gaol Surgeon, \$200 per annum.

SAULT STE. MARIE GAOL,

District of Algoma.

Visited this Gaol on the 27th July, there being on that occasion 3 prisoners in custody,—two waiting trial, respectively for rape and larceny, and the other under sentence for an assault. The two first-named, although waiting trial for serious offences, were found outside of the gaol precincts cutting wood. The sheriff was warned of the danger attending this practice, particularly with untried prisoners, and a gate, opening to the working yard, was recommended, to enable that kind of work to be done within the walls.

The corridors and cells were in excellent order, and very neat and clean. The beds were made up on the cement floor; a few regulation bed stretchers were ordered.

The drain constructed a short time ago has not had the effect of completely drying the basement, which it will be difficult to remedy, owing to the damp site upon which the Gaol is erected.

Number of prisoners committed, 12.

The entire cost of the Gaol for the year ending 30th September, was \$1,058.12, of which amount \$400 was paid to the Gaoler; Turnkey, \$109; Gaol Surgeon, \$29.50.

I also visited the Thunder Bay Lock-up at Fort William. The building used for the purpose was built for a stockade by the Red River force, and is surrounded by the usual military picket fence and dry ditch. At the time of my visit, the building was also used for storing ammunition and Government supplies. The structure is built of wood, with ordinary doors and padlocks, and, whether for the safe keeping of prisoners, or security against fire, is quite unsuited for the purpose of a Gaol. Prince Arthur's Landing being the terminus of the inland lake communication with the North-West, and the depot for the transhipment of stores, will naturally form a point for criminals and disorderly characters to congregate from the surrounding country, as well as in transit to the North-West. Under these circumstances, I would most respectfully recommend that a brick one-story structure, with space for twelve cells, and rooms for the keeper, be erected upon the ground of the public buildings.

STRATFORD GAOL.

County of Perth.

Inspection was made of this Gaol on the 3rd and 30th May, and again on the 24th October. At the two first visits the several departments of the Gaol and the yards were found in a very creditable condition of cleanliness and order; but at the last inspection, owing to repairs then in progress, the lower corridors were in a state of disorder.

There were 13 prisoners in custody on the 30th May,—5 of whom had been committed as insane or otherwise incapable of taking care of themselves. Three of this number have been residents of the Gaol for years and are proper subjects for the Idiot Asylum as soon as it is completed.

One woman was recommended for transfer to London Asylum, and a man, far advanced in general paresis, would also have been removed, but his death took place a few days after my visit to the Gaol. A little girl, 7 years of age, had been committed as a vagrant and "loose person," which I learned *really* meant that she had been abandoned by her parents, in which case the Gaol was not a proper place for her.

At my visit on the 31st May, there were 10 prisoners in Gaol—4 men and 6 women. On that occasion I passed through the Gaol with a Committee appointed by the Council, and pointed out the alterations and repairs absolutely required, which subject is more fully referred to in the general Report on Prisons.

At my inspection on the 24th October, the material and workmanship, connected with the alteration of the Gaol, were examined and found to be staunch, strong and well done. A few suggestions were entered on the minute book for the action of the Building Committee.

A prisoner, who had just received sentence to the Penitentiary and was to have been removed at once, committed suicide by hanging himself on the bars of his cell gate.

83 prisoners were committed during the year, 7 of whom were insane or idiotic.—\$2,000.10 were expended in maintaining the Gaol for the year, \$1,008 of which were for officials' salaries, viz., Gaoler, \$450; Turnkey, \$242; Matron, \$120; Assistant do., \$96; Gaol Surgeon, \$100 per annum.

ST. THOMAS GAOL.

County of Elgin.

The commitments to this Gaol for the year 1870-71, were nearly 50 per cent in excess of the previous year. The fact that only three of the entire number were re-committed, leads me to believe that the increase is attributable to the presence in the County of a considerable foreign population, engaged in constructing railways.

Inspection was first made of the Gaol on the 4th July, and again on the 18th August. At my first visit there were 7 prisoners in confinement, 6 men and 1 woman; all under sentence, with the exception of one man, awaiting trial for forgery.

The cells in the lower corridors were very close and damp, and the ventilation exceedingly

bad, even the bedding had a musty odour. The floors of the cells and corridors are laid with brick, which in wet weather draws the moisture to such a degree that the lower cells are quite unfit for the incarceration of prisoners.

Examination was made into the circumstances connected with the escape of a prisoner from the Gaol on the 21st April; when it was discovered that the escape was attributable to neglect of duty, and disobedience of instructions, on the part of the Turnkey, in having taken the prisoner beyond the Gaol limits, for which the Turnkey was discharged.

The attention of the Council was again called, in the manner prescribed by the Inspection Act, to the necessity of at once proceeding with the erection of walls to surround the working and airing yards, as well as other alterations and additions to the Gaol. The manner of doing the repairs was discussed and determined at a meeting I had with a special Committee of the Council in 1869, with the understanding that the work was to have been proceeded with immediately, although up to the present time nothing has been done. The County Council has lately asked for another meeting, which will shortly take place.

53 prisoners were committed during the year. Gaol expenditure for the same period, \$1,846.00, including salaries, viz., Gaoler, \$700; Turnkey, \$300; Matron, \$100; Gaol Surgeon, \$100 per annum.

TORONTO CITY GAOL.

Official inspection was made of this Prison on the 23rd August, on which day there were 120 prisoners in custody—61 males and 59 females. The number committed for vagrancy, drunkenness and disorderly conduct, was unusually large, and those for criminal offences very limited. One man and 3 women had been committed as lunatics, three of whom were recommended for transfer to Rockwood Asylum, the other, although not a proper subject for Asylum treatment should be removed to the House of Industry. In addition to the four prisoners certified to be insane, three women gave indication of mental derangement,—one of them charged with a criminal offence. An examination of these cases was recommended.

Only two prisoners were in the Hospital, one on the male side and one on the female; but in passing round the corridors with the Gaol Surgeon, I observed that medicine was given to 13 prisoners, while many others consulted with him respecting their ailments. The Gaol Surgeon reports that the general health of the Prison has been good during the year.

One prisoner was under punishment in the dark cell for refusing to work.

14 men and 11 women were at work in the shoe shops, (under contract) manufacturing children's shoes, and it is very desirable that the number should be much increased.

In the female corridors, some of the prisoners were very noisy, while others were allowed to pass from one corridor to another. Instructions were given to confine the prisoners, not engaged at work, to the wards to which they belonged, and to strictly enforce the rules against loud talking.

Contrary to the regulations, the apparel of sentenced female prisoners, who had received prison clothing, was allowed to remain in the cells, which in warm weather does not improve the atmosphere, and obstructs the proper ventilation of the space, already very confined. In my minutes of inspection I directed the clothing to be removed to the store rooms.

The corridors, cells, and beds and bedding on the female side of the Prison, considering the class of prisoners in custody and their filthy habits, were in a very creditable condition of order and cleanliness, and the same may be said of every part of the women's side of the Gaol. On the male side the basement was rather untidy and in want of airing. The Gaol officials were reminded that unless the utmost cleanliness was observed in a basement naturally damp, either from bad drainage, or some other defect, the foul smell would extend to the upper parts of the building. The cells and bedding on the male side were in fair order.

I again inspected this Gaol on the 3rd November, on which occasion there were 153 prisoners in confinement—85 men and 68 women. Many of them charged with, or under sentence for, the most serious offences known to the law. Six of the number were committed as being insane, four of whom were recommended for removal to Toronto or Rockwood Asylums. One lad, under 15 years of age, although certified to be insane, is without doubt, a proper case for confinement in the Idiot Asylum, now in course of construction.

I saw and conversed with every prisoner in the Gaol; several complaints were received and enquired into. From the foul odour that pervaded nearly every part of the building, it was very apparent that the ventilation of the Gaol, and the means of carrying off the sewer-

age, were in the most defective condition. On examination I discovered that the main sewer at the point of exit from the building was untrapped, without any means of preventing its exhalations from permeating the atmosphere of the entire building. To make matters worse, the main sewer, in place of entering the river Don under cover, is left exposed for a considerable distance. If foul smells and bad ventilation are factors to epidemics, the Toronto Gaol is in a most unsafe condition in that respect, unless steps are immediately taken to improve its sanitary condition.

Number of prisoners received during the year, 1787. Total Gaol expenditure \$14,541.97, which includes officials' salaries, as follows.—Gaoler, \$1,600; Gaol Surgeon, \$600; Clerk and Steward, \$1,000; 1st Turnkey, \$700; 2nd Turnkey, \$450; 4 under-Turnkeys, at \$400 each; 1st Matron, \$280; 2nd Matron, \$280; Engineer, \$980; Van-driver, \$400 per annum.

WHITBY GAOL,

County of Ontario.

I visited Whitby Gaol on 8th May, and again on the 11th October. At both inspections the Gaol and its surroundings were in the highest state of cleanliness and order. Some repairs, which were needed, have been made to the buildings. The unsafe state of the working yard gates was brought to the notice of the Council.

At my first visit, there were 4 prisoners in custody,—3 men and 1 woman,—the latter a lunatic, whose transfer to the Asylum was recommended.

There were 9 prisoners in Gaol on the 11th October,—6 men and 3 women,—one of the former committed as insane, and respecting whose case a special report was made to the Honourable the Provincial Secretary. A prisoner was also found in custody, who had escaped from the former Gaoler, while at work in his barn, nearly three years ago, and who had lately been re-captured in the western part of the Province. This prisoner was sentenced to six months' imprisonment, and a fine of \$100, and to remain in custody until paid. The six months have expired, but as he is unable to pay the fine, he may have to remain in Gaol for an indefinite period, unless otherwise discharged.

The practice of paying the gaoler a fixed sum (\$1,000), out of which that official has to provide a Turnkey and Matron, is very objectionable, and cannot be discontinued too soon. Every officer of the Gaol should be engaged by the Sheriff, to whom they should be directly responsible.

145 prisoners were committed during the year, 5 of whom were insane.

Gaol expenditure, \$1,875.74, of which amount the Gaoler receives \$1,000, out of which he pays the Turnkey \$150, and the Matron \$100, and their board. The Gaol Surgeon receives \$150 per annum.

WELLAND GAOL,

County of Welland.

Inspection was made of this Gaol on the 11th April and 7th September. There were, on the first occasion, only 3 prisoners in confinement,—all men. One of them had been committed as a lunatic, but as he appeared to be nearly, if not entirely, restored to a sound mind, (although his insanity was of a recurrent character, and he had formerly been in an Asylum), his discharge under the Statute was recommended.

On the 7th September I found 8 prisoners,—all men. One of the number was insane, and whose removal to London Asylum immediately afterwards took place.

Four insane persons have been removed to Asylums during the year.

At both visits, every department of the Gaol was found in a very clean and tidy state, with as good order as its many structural defects will admit of.

The north wing of the Prison, then in course of re-construction, was thoroughly examined, and some defects and deficiencies pointed out to the architect and contractor, which, I have since been informed, the County Council has given instructions to remedy.

Total number of prisoners committed during the year, 86, which is considerably under the commitments of the previous year.

Gaol expenditure, \$1,855, which includes salary of Gaoler, \$345; Turnkey, \$312; Matron, \$204; and Gaol Surgeon, \$80 per annum.

WOODSTOCK GAOL,

County of Oxford.

Statutory inspection was made of the Woodstock Gaol on the 19th of June and 21st August. At the first visit, the entire premises were in a very creditable state of order and cleanliness; but at the last, owing to alterations in progress to the heating apparatus, considerable disorder prevailed.

At the June inspection, there were 10 prisoners in the Gaol,—8 men and 2 women. One of the former, under sentence for larceny, gave evidence, by his incoherent manner of talking, and other indications, of unsound mind. An examination was recommended, when he was found to be insane, and was immediately removed to London Asylum. A female, who has been in Gaol over two years, was, at the same time, certified to be insane, but her insanity, if not idiocy, appeared to be of such a character that she would derive little, if any, benefit from Asylum treatment. Her removal was not recommended.

Complaint was received from one prisoner respecting the rations; on examination it was found to be without foundation.

There were 7 prisoners in custody at my second visit,—5 males and 2 females. One of the males, a youth under 16 years of age, was under sentence to "solitary confinement for one week." The mode of carrying out the sentence,—viz., by continuous confinement in a badly-ventilated cell, night and day,—was, in my opinion, at variance with the objects of the Statute, as well as the intention of the Judge. Complete and entire separation from other prisoners, although accompanied by access to a day-room and airing-yard, where there are no other prisoners, is as much *solitary* confinement as continuous custody in one cell.

In accordance with a recommendation made at a previous visits, a dark punishment cell has been provided, and a new heating furnace placed in the corridors.

Only 70 prisoners passed through this Gaol for the year ending 30th September against 119 for the previous year.

Gaol expenditure for the same period, \$3,070, of which amount \$1,600 is for salaries, viz.: Gaoler, \$800; Turnkey, \$400; Matron, \$400; Gaol Surgeon, \$200 per annum.

WALKERTON GAOL,

County of Bruce.

The number of commitments to this Gaol for the year ending 30th September, has been singularly small. Inspection was made on the 23rd June, on which day there were six prisoners in confinement,—4 men and 2 women. Only two of this number were charged with, or were under sentence for, criminal offences; the remaining four were in custody as lunatics, two of whom have been in the gaol for over two years, not being proper subjects for Asylum treatment. One insane woman was recommended for transfer, and, a few days after my visit, was removed to London Asylum. A man, who had been committed for an assault, but who, during imprisonment, gave evidence of insanity, had so far recovered, that his removal to an Asylum was not necessary.

With the exception of one corridor, which was used for a workshop, the Gaol and yards were in a fair state of cleanliness and order. As prisoners were not employed in the workshop referred to, the use of the corridor for that purpose was ordered to be discontinued.

The attention of the County Council was directed to the condition of the Gaol floors, the seams of which had opened through shrinkage; also to the necessity of dividing that portion of the yards used by the gaoler's family from that used for Gaol purposes.

Complaint having been made that the services of the Gaol turnkey were used for other than Prison purposes, an examination will be made into the matter at next inspection.

Total number of commitments, 22, of whom 5 were insane. Gaol expenditure (including salary of Gaoler, \$600; Turnkey, \$350; Matron, \$150; Gaol Surgeon, \$80), \$1 563.59.

PROVINCIAL REFORMATORY.

PENETANGUISHENE.

The number of youths sentenced to the Reformatory, for the year ending 30th September, was 48; which, with the number in custody on the 1st October 1870, say 163, made the total number of inmates for the year, 211; of this number 46 were discharged on expiration of sentence, 2 had the Royal pardon extended to them, 2 were transferred to the Kingston Penitentiary as incorrigible, and 6 effected their escape, leaving 155 inmates in the Institution on the 30th September, which as the annexed statement will show, is the lowest number that has been in confinement for the past six years:—

Commitments for the year 1861...	44	Number in confinement at the end of the year 1861.....	94
Commitments for the year 1862...	32	" " 1862.....	99
Commitments for the year 1863...	38	" " 1863.....	97
Commitments for the year 1864...	58	" " 1864.....	134
Commitments for the year 1865...	66	" " 1865.....	154
Commitments for the year 1866...	54	" " 1866.....	161
Commitments for the year 1867...		" " 1867.....	170
Commitments for the year 1868...	59	" " 1868.....	173
Commitments for the year 1869...	47	" " 1869.....	170
Commitments for the year 1870...	41	" " 1870.....	163
Commitments for the year 1871...	48	" " 1871.....	155

From the above figures it might at first sight appear to be a matter of congratulation, that though the increase of population in the Province has been so rapid during the past ten years, the commitments to this Institution remain about the same, and the average number in custody, lower than it has been since 1865. But an examination of the Gaol statistics attached to this Report, as well as those of the past six years, completely destroys the illusion that Juvenile depravity is on the decrease; for while we find that there were 235 lads under 16 years of age committed to the several Common Gaols of the Province in 1861, the same year there were 44 commitments to the Reformatory; whereas in the year now reported on, there were 329 committed to Gaols and only 48 transfers to the Reformatory. While these figures indicate an increase of 40 per cent. in the commitment of boys under 16 years of age to the Common Gaols, they shew that the commitments to the Reformatory have only increased about 1 per cent.; in both years there were, without doubt, prisoners over 16 years of age committed; but for the purposes of comparison, both periods may be assumed to be alike in this respect.

With these figures before me I can come to no other conclusion than that there is a very great diversity of opinion among Judges as to the offence, age of offender, and other circumstances which render it desirable to sentence Juvenile offenders to this Institution, and the increased number of lads found under sentence in the Common Gaols, during the inspections of the past year, confirms this opinion.

The Counties from which the commitments of the present year were received, were as follow:—

Brant.....	1	Leeds & Grenville	1
Kent.....	2	Essex.....	1
York, (including City of Toronto).....	5	Waterloo.....	5
Simcoe.....	2	Carlton.....	1
Northumberland & Durham.....	5	Middlesex.....	3
Frontenac.....	5	Ontario.....	2
Norfolk.....	2	Lincoln.....	1
Lambton.....	4	Wentworth.....	2
Haldimand.....	1	Elgin.....	1
Perth.....	2		—
Total.....			46

The following statistical tables will prove interesting, as they shew the entire operations of the Reformatory from its opening in 1859, until the close of the present official year, 30th September:—

Total number of Commitments to the Reformatory since its establishment up to the 30th September, 1871..... 598

Disposed of as follows:—

Discharged by expiration of sentence.....	383	
Removed to Kingston Penitentiary as incorrigible	19	
Royal pardon granted to.....	27	
Escaped from Reformatory.....	9	
Died.....	5	443

Remaining in the Reformatory on the 30th September..... 155

The Nativities of the entire Commitments were:—

Province of Ontario.....	402
Province of Quebec.....	30
United States.....	61
England.....	57
Ireland.....	23
Scotland.....	12
Nova Scotia.....	3
Newfoundland.....	2
Germany.....	7
Malta.....	1
	598

The Nativities and Religion of the 48 commitments of the present year are returned to me as follow:—

<i>Nativity.</i>	
Province of Ontario.....	34
Province of Quebec.....	1
United States.....	5
England.....	5
Ireland.....	1
Nova Scotia.....	2
	48

<i>Religion.</i>	
Church of England....	16
Roman Catholics.....	19
Presbyterians.....	3
Methodists.....	8
Baptists.....	48
	7

The following statement shows the crimes for which the commitments were made.—

Larceny.....	39	Horse stealing.....	1
Felony.....	2	Robbery	1
Burglary.....	4	Stealing from person.....	1
Arson	1	Receiving stolen goods.....	1
Housebreaking.....	4	Malicious injury.....	1
Obtaining goods under false pretences...	1		
Stealing a watch	1		
Vagrancy.....	1		
			<hr/> 48

The Religion of the entire commitments was :—

Church of England	225
Roman Catholics.....	203
Presbyterians.....	53
Methodists.....	90
Baptists	20
Lutheran	6
Jewish	1
	<hr/> 598

The Crimes for which the entire commitments were made, from the establishment of the Reformatory up to 30th September, 1871, were as follow :—

Larceny	405	Stealing in warehouse	4
Felony.....	37	Stealing money	5
Burglary	21	Embezzlement	2
Highway robbery	3	Sheep-stealing	2
Arson	7	Obstructing railway track.....	1
House-breaking	14	Stealing from person	3
Vagrancy	8	Assault	2
Horse-stealing.....	12	Receiving stolen goods.....	2
Forgery	4	Attempt at arson.....	1
Robbery	5	Misdemeanor	1
Assault with intent to commit rape....	2	Wounding a horse	1
Receiving stolen money	1	Breaking into store	2
Keeping found money.....	1	Obtaining money by false pretence	2
Assault with intent to rob	3	Breaking into warehouse with intent to	
Breaking windows	1	steal.....	1
Summary Conviction Act	42	Stealing watch.....	1
Lunacy	1	Malicious injury	1
			<hr/> 598

Statutory inspection was first made of this institution in March, on which occasion my visit extended over three days, and again in October, when I spent five days in making a thorough inspection of the buildings and property, and a general examination into the management of the affairs of the Institution.

Very little progress had been made with the new Buildings. Although the new dormitory was roofed in last winter, the construction of the interior cell work was not proceeded with until October, owing to the want of brick, and other building material. The boiler and engine are only now being placed in the engine-house, and the machinery and steam heating for the workshop are not yet in working order. The vexatious delay that has taken place in the completion of the Reformatory buildings, which, without doubt, is partly attributable to a desire to perform as much work as possible with the labour of the inmates, and a great deal to the unfortunate location of the Reformatory, has had a serious effect upon the discipline of the Institution, and the everyday working of its affairs.

Although at first sight it may appear to be economical to carry on the construction of buildings, in an institution of this character, with the labour of the inmates, I am convinced that the history of this establishment, not only furnishes proof to the contrary, but that the best interests of the Reformatory have been sacrificed in not having a *complete* establishment to occupy from the first. Had this been the case, the Warden could have placed the inmates at trades and proper industrial pursuits as soon as they entered the Reformatory, and a well defined system of administration and discipline could have been introduced into every department; but before this can be done, and the proper work of the Reformatory entered upon and continued without interruption, the construction of buildings must be closed up and completed.

Carpenter Shop.

The unfinished state of the new workshop has seriously lessened the revenue of the carpenter department, and prevented the contemplated increase of the number of boys in that trade. The average number employed was 8, who, with the master carpenter, have been engaged nearly the whole year in preparing material for the new buildings, in making general repairs to the Reformatory buildings, and to the houses of the officers and employees, and in the erection of a new blacksmith's shop, as well as in manufacturing articles of furniture for the Institution, for which works, little or no cash revenue was received.

Blacksmith's Shop.

The number of lads engaged in this shop generally averages 4. Besides doing the general repairs and jobbing for the Reformatory, which amounts in the year to a considerable sum, the master blacksmith (with the assistance of a journeyman) and the boys, have manufactured 120 cell gates, which this year were sold to the Central Prison. Iron has been forwarded to the institution for the manufacture of the remainder of the cell gates, and other iron work required for the Central Prison. The new blacksmith's shop, the construction of which was nearly all performed by Reformatory labour, is 52 feet long by 21 feet wide, and contains three forges.

Cooper's Shop.

Operations in this shop were closed for a considerable portion of the year, on account of the master cooper having left the service of the institution, and the delay that occurred in engaging a proper man to take his place. The services of a very competent cooper were secured in July, when work again commenced, but as the stock of buckets, etc., had become much reduced, a great deal of work had to be done for the Reformatory. The shop is now engaged in the manufacture of pork and fish barrels, for which there is a ready sale. Wash-tubs, water buckets and pails are also being made, and will be offered for sale in the village of Penetanguishene. Six boys are now engaged in the shop.

Shoe Shop.

This shop employs nine boys. With the exception of sales to the officers and employees, the time of the master shoemaker and his boys was taken up during the past year in making and mending for the Institution.

Tailor Shop.

The average number of boys engaged in this shop for the past year was 16. At both visits to the Institution, the stock of manufactured goods was found to be very low, and not sufficient for the requirements of the establishment. The Warden was instructed to send in requisitions for cloth, to enable the summer and winter suits to be made up in good time. Complaints were received from several boys, that confinement to the tailor shop, and the position of the body during work, were injuring their health. The surgeon was requested to examine and report upon the complaints. Certainly the appearance of the boys, in a few instances, confirmed their statements.

Farm and Garden.

In these departments there are generally about 12 boys constantly employed, although on some occasions the number is considerably over that. It is, however, very desirable, both for

the future welfare of many of the inmates, as well as with a view to reducing the expenditures, under the headings of "Victualling" and "Farm" accounts, which this year amounted to \$6,313.70, that the number should be largely increased. Besides doing the ordinary farm and garden work, all the wood is cut by the boys, under the supervision of the farmer, as well as a large amount of teaming and other labour connected with the construction of the new buildings. The domestic departments engage about twenty hands, under the general direction of the steward, although there is not constant employment for that number. As soon as the shops are in proper working order, some of the number will be distributed among the trades.

Other Employments.

In addition to the services before detailed, there are about eighty lads, ranging from ten to thirteen years of age, for whom, in the present state of the Institution, it is very difficult to find employment. Cutting wood, removing stones from the land, and general light work, have kept many of them employed in the past; but it is now of the utmost importance that a trade, or branch of industry, should be established, that will not only provide constant, but remunerative employment for this large number of boys.

Chapels and Schools.

I attended divine service in the Protestant chapel on two occasions during the year. The services were conducted by the Rev. Mr. Hallan. About 90 boys were in attendance. They were all well behaved, and very generally joined in the responses. The introduction of vocal and instrumental music, into the services, has produced a very marked improvement in the conduct of the boys, and has rendered them more attentive during divine service. All the classes, both in the Protestant and Roman Catholic schools were pretty thoroughly examined in the several common branches. In both schools a few excellent scholars were found; and, while a large number were in a very fair state of proficiency, there were, however, some pupils in a lamentable state of ignorance, although, in some instances, they had been two and three years in the Reformatory. Some of the younger lads were also in a backward state. The chaplains, in these cases, were instructed to make a special effort on behalf of this class, and, if necessary, an extra hour's schooling every day was recommended for those requiring it.

Mental Defectives.

There are several lads now in confinement whose mental condition should have exempted them from sentence to this Institution. Their custody is not only attended with a great deal of trouble, but is exceedingly detrimental to the discipline of the Reformatory. The bad habits and practices of one of this number, who was also subject to fits, was so much calculated to have a baneful effect upon the youths associated with him in the same dormitory, that I recommended his discharge from the Institution, which His Excellency the Lieutenant-Governor was pleased to order. I learn that he has since been committed to Gaol "as a dangerous person, incapable of taking care of himself."

Diet.

The rations are of the best quality, and the scale of diet most liberal.

Breakfast consists of $\frac{1}{4}$ lb. of meat, 1 lb. of bread, and pea coffee, sweetened with molasses.

Dinner— $\frac{1}{2}$ lb. meat, $\frac{1}{2}$ lb. bread, soup, with vegetables and potatoes.

Supper—Porridge or mush, or sometimes $\frac{1}{2}$ lb. of bread, with milk.

On Sundays, the dinner consists only of cooked rice and bread.

The above dietary list is generally adhered to, although a change occasionally takes place.

Escapes.

At my last official visit to the Institution, I made an examination, as Commissioner, into the circumstances connected with the escape of a number of the inmates from the Reformatory. My report thereon, together with the evidence taken upon oath, was transmitted to

the Honourable the Provincial Secretary, for the information of His Excellency the Lieutenant-Governor.

From the evidence of the Warden, it would appear that no less than 21 prisoners escaped from the Reformatory between the 1st April and the 1st September of the present year, as follow :—

On the 1st April, 3 boys escaped by climbing over the yard fence. They were recaptured three hours afterwards at a short distance from the Reformatory.

On the 8th of May, one lad escaped from the grounds, and was re-captured next day.

On the 1st June, two boys, on coming out of school, scaled the board fence, and effected their escape. Up to the present time they have not been re-captured.

On the 6th June, at noon, 5 prisoners belonging to the kitchen and dining-room gang broke open the dark punishment cell, and released their ringleader, who was under punishment, and another prisoner in the cell dormitory, when they all (7 prisoners) made their escape over the fence. 5 of the number were re-captured next day, but 2 are yet at large.

On the 18th June, during the night, 2 boys, confined in the associated dormitory, unscrewed the iron fastenings of a window, and made their escape over the fence.

On the 25th August, 2 of the inmates, along with 4 others, were taken to Quarry Island, about six miles from the Reformatory, on Georgian Bay, to quarry stone for the new buildings. When they were preparing to go into camp at night, the two boys referred to, took possession of the small boat, and made good their escape to the main shore. They have not been re-captured.

On the 1st September 4 young lads burrowed under the fence at noon while at play and were recaptured in a few hours, at a short distance from the Reformatory.

It will thus be seen that of the 21 escapes, six were successful, and have not yet been recaptured. Nine were retaken in a few hours after the escapes became known, at a short distance from the Institution, and 6 were captured within 24 hours, some of them at a considerable distance from the Reformatory.

From the evidence taken it is very clear that all the escapes, with the exception of the two from Quarry Island on the 25th August, and the two at midnight on the 18th June from the Associated Dormitory, can be traced to neglect in placing a proper guard in the yards during day time. The yard is surrounded by a board fence fifteen feet high, which can be scaled or burrowed under, unless a constant watch is placed over the prisoners, this defect in the supervision was supposed to have been remedied after the escape of the 7 prisoners on the 6th June, by the appointment of two day guards, whose duty it was to patrol the yard from the time the boys left their cells in the morning until locked up at night, with the exception of one hour at noon, when the boys were in charge of the Deputy Warden and Steward. During that hour 4 small boys burrowed under the fence, on the 1st September and escaped, but were afterwards recaptured.

Previous to the appointment of the day watch, alternate night and day guards were on duty, and when the escape of 7 boys took place on the 6th June, a guard was in the yard at the time, but notwithstanding the noise that must have been made in breaking open the punishment cell with an axe, he failed to detect the plot, and otherwise proved himself unfit to perform the duties of a guard.

The boys in the Associated Dormitory are always placed under a guard at night, whose duty it is to remain in the Dormitory and watch over them. On the night of the 18th June, it was proven that the guard fell asleep while on duty, when two lads removed the bars and made their escape. The discharge of this keeper was recommended.

With respect to the escape of the two young men from Quarry Island, it has been the practice to allow prisoners, selected with care, to quarry stone on the Island for building purposes. On the occasion referred to, the guard in charge seems to have taken every precaution to prevent escapes. The confinement of the inmates to the Reformatory buildings and yards, and the abandonment of the practice of taking them beyond the Reformatory precincts for the purposes of procuring building material, cutting wood for fuel, and general farming operations, would be attended with a very great increase in the cost of maintaining the Institution, and the fact that this is the first escape that has taken place from the quarry and farm gang, proves that the selection of boys for this duty has been made with great discretion; under these circumstances, I am not prepared to recommend that the practice be given up.

I have also to state, that on my appointment as Inspector, I formed the opinion that the

Reformatory should be looked upon more in the light of an industrial school than a penal establishment, and have given effect to this belief, by directing that all badges and distinguishing marks of criminals should be done away with as much as possible. Among the worst of these distinctions was the habit of clothing the boys as Penitentiary convicts, by having each half of the coat and trowser legs of different colours. The only reason for keeping up this practice was to prevent escapes, and when they occurred, to assist in their speedy capture by enabling the population surrounding the Reformatory to distinguish runaways from ordinary lads.

As the Warden is of opinion that this has assisted some of the lads in making good their escape, it may again become necessary to adopt a distinguishing dress for the inmates.

In closing my remarks on this subject, I would most respectfully bring under the notice of the Government, the practice that prevails in many of the Courts in the Province of sending a class of young men, in many instances over 21 years of age, to the Reformatory, whose appearance and previous history must render it very apparent that they are entirely beyond Reformatory influences, and who are, to all intents and purposes, incorrigible criminals, whose bad influence and example, when sent to an Institution of this character cannot be overstated, and where there are neither the means nor the structural requirements necessary to keep them in safe custody.

STATE OF THE BUILDINGS, PROPERTY, FURNITURE, &c.

A thorough examination was made at both visits, of the buildings and property of the Institution.

The dormitories were inspected both during the day, when they were vacated, and at night when the boys had retired to bed, and were always found in a very creditable state of cleanliness and order, the ventilation of the large separate cell dormitory was generally good, although in some of the cells in which boys had been confined during the day for punishment, and in others where the inmates did not pay sufficient attention to personal cleanliness, the air was not as pure as it should be. Instructions were given to have the bedding aired for two hours and then placed on the bed frames in the cells in a uniform manner at a given hour every day, the beds not to be made up until night, except in cases of sickness.

The flooring in many of the cells has commenced to decay, partly owing to the want of sufficient fall to carry off the water when scrubbing is going on, and also to the practice of allowing the inmates to wash in the cells, which can only be remedied by providing a large washing and bath room. The cell floors will be renewed with a proper pitch to the gates.

The dormitory for the younger boys was in good order, although the associating of 40 lads in one room, without any division, is very objectionable in an Institution of this kind; as soon as the new wing dormitory is ready, this difficulty will be overcome. The bedding in both dormitories was sufficient and of good quality and very neat and clean.

The kitchen, dining rooms, store rooms, as well as the other domestic departments of the main building were generally well kept; the store rooms are too small, which necessitates the storing of certain supplies in the corridors, until increased space can be provided.

That portion of the farm property cleared of boulders, appeared to be in a very fair state of cultivation, and notwithstanding the season had been unusually dry, a fair crop of farm and garden produce has been raised, although only a fraction of what could be obtained from good land.

The barns, stables, and other outhouses attached to them were in excellent order, and well kept.

The farm stock consists of 5 horses, 12 cows, 2 working oxen, 69 sheep and lambs, 34 pigs, &c.

DISCIPLINE.

The behaviour and conduct of some of the inmates during the past year has been far from satisfactory, and although generally confined to a class of incorrigibles from 18 to 22 years of age, who should never have been committed to the Reformatory, still the insubordination and plotting of this class have had a bad effect upon the younger boys. Two lads were removed to the Kingston Penitentiary as incorrigibles, and the two who escaped on the 6th June deserved the same fate, hard though it be.

The establishment of the Central Prison will overcome many of the defects this Institution now labours under, in the class of prisoners committed to it, by enabling them to be sent to an intermediate establishment, better suited for them, both in respect to discipline and the means of safe custody.

I saw and conversed with every inmate of the Reformatory at my last inspection. No complaints were received from them, except the close confinement to the cells on Sunday. To remedy this the Warden was requested to allow a certain number of the inmates to spend a portion of Sunday in the large Hall under the charge of a guard.

EXPENDITURES.

The accounts of the Institution were audited up to the 31st July, the entries in the several books were compared with the accounts and vouchers and the whole found correct.

The following returns shew the value of the work performed in the several shops for which no cash revenue was received, which, added to the amount transmitted to the Honorable the Treasurer for sales of articles, gives the following result :—

Cash revenue from shops.....	\$2,180 43
Other works as per statement annexed.....	3,166 13
	<hr/>
	\$5,346 56

Value of labour performed in the carpenter shop from 1st October, 1870, to 30th September, 1871, inclusive :—

New dormitory roofing, sashes, door frames and joisting.....	\$488 00
New gate house.....	30 00
New water closet.....	20 00
New blacksmith shop.....	60 00
New milk house.....	8 00
Old dormitory, 200 stools, 100 bed boards.....	100 00
do. 1 lounge.....	3 00
Finishing cooper's shop.....	40 00
Boiler house.....	14 00
Covering ridge roof of new building with sheet iron.....	30 00
Dining hall, 86 stools	34 00
Fitting and fixing iron grating, main building, brick wing	16 00
Sundries and general jobbing work.....	100 00
	<hr/>
	\$943 00

Blacksmith's Shop.

Making horse shoes, 171 a 25c.....	\$ 42 75
do Roof irons.	10 00
do Window grating for cellar.....	2 00
do 56 bolts, new building.....	5 00
do 8 cramps, do	1 50
do Grating for windows, new building	2 50
do 14 bolts do do	4 00
do 23 Picks.....	23 00
do 8 crowbars.....	8 00
do 1 sample cell gate.....	2 00
do Ironing new buggy	20 00
Horse shoeing, and sundry repairs to waggons, sleighs, ploughs, &c.	298 61
	<hr/>
	\$419 36

Tailor's Shop.

Coats made for discharges, 50, at 1.50.....	\$ 75 00
Pants do do 48 " 40.....	19 20
Vests do do 47 " 40.....	18 80
Winter coats made, 159 " 1.25.....	198 75
do turned 29 " 1.20.....	34 80
Summer coats made 159 " 1.00.....	159 00
do pants made, 176 " .40.....	70 40
Winter pants made, 191 " .40.....	76 40
Towels made, 90 " .05.....	4 50
Pillow slips made, 144 " .10.....	14 40
Sheets do 98 " .10.....	9 80
Bed ticks do 24 " .12 $\frac{1}{2}$	3 00
Prison caps do 151 " .20.....	30 20
Sundry repairs.....	31 85

\$746 10*Shoe Shop.*

Women's and children's boots made, 10 pairs at .50.....	5 00
Cobourg boots made, 441 " " .75.....	\$330 75
Wellington do do 57 " " 1.25.....	71 25
Shoes do do 5 " " .75.....	3 75
Sundry repairs	234 80

\$645 55*Cooper's Shop.*

140 Night buckets at 35c.....	\$ 49 00
140 Piggins " 20c.....	28 00
141 Small wash tubs " 20c.....	28 20
94 Water buckets " 25c.....	23 50
22 Wash tubs, large " 60c.....	13 20
12 Milk tubs " 40c.....	4 80
20 Pork barrels " 50c.....	10 00
12 Fish half barrels " 20c.....	2 40
1 Half barrel, " 50c.....	0 50
2 Sets measures, " 2-00	4 00
Sundry repairs to buckets, &c.	8 00

\$171 60

Value of boys' labour at Brick-making, from 1st October, 1870, to 30th September, 1871, inclusive :—

	Bricks.
Burning and making 1st kiln.....	100,356
do. 2nd kiln.....	59,967

160,323 at 1.50 \$240 52

The following statement shews the value of produce received from the farm and garden, but when the expenditures for that service are placed to the Debit of the account, the amount realized is very insignificant :—

Timothy hay 22 tons at \$10.00.....	\$220 00
Marsh do 4 " 5.00.....	20 00
Barley, 25 bushels " .50.....	12 50
Potatoes, 292 " " .40.....	116 80

Forward..... \$369 30

		<i>Forward</i>	\$369 30
Wool, 234 lbs.	at .30.....		70 20
Pork and lard 2113 lbs	“ .06.....		126 78
Beef, &c., 3368 lbs.	“ .07.....		235 76
Milk, 1513 gallons,	“ .12.....		181 56
Butter, 232 lbs.	“ .16.....		37 12
Garden produce.....			349 53
			<u>\$1,370 25</u>

Wood Cutting.

Fire wood cut, 314 cords, at 50c.....	\$157 00
Hemlock for brick and lime burning, 140 cords at 50c.....	70 00
Hauling across the bay and to new P. building 409 cords, at 50c....	204 50
	<u>\$431 50</u>

The estimate for expenditure for 1872 is herewith transmitted:—

A detailed statement of expenditure for the year ending 30th September, is also attached, shewing that the sum of \$23,889.82 was expended; this amount however, includes \$1,384.40 chargeable to capital account for new buildings, which would leave the expenditure of the year for maintenance, \$22,506.42. When the cash revenue is deducted from this amount, the net cost to the Province of maintaining the Institution for the year ending 30th September, is shewn to be \$20,225.99. As the average number of inmates in confinement for the same period was 160, the annual cost per head was therefore \$127.03.

RECOMMENDATIONS.

In my last report, I referred to the great necessity that exists in this Institution for establishing some trade or branch of industry that will give employment to the lads committed between 9 and 15 years of age, now numbering about 80. With the exception of “odd jobs,” there is really nothing for boys of this age to do; and when it is considered, that school instruction occupies less than three hours a day, this great and increasing evil will be apparent to all. Committing boys to this Reformatory, and, while there, even giving them a fair education, falls far short of the object aimed at in the establishment and maintenance of an institution of this character; and, if habits of industry and a knowledge of some trade, which are the best safeguards against relapsing into crime, are not imparted to them during their residence in it, the chief aim of the establishment is unaccomplished, and it at once degenerates into an ordinary prison.

It cannot be denied that the unfortunate location of the Reformatory at Penetanguishene increases the difficulty of selecting, with any degree of certainty, a branch of industry which will be successful and remunerative in its operations; while, on the other hand, if the Institution was located in a commercial centre, many branches of manufactures could be undertaken and carried on with great benefit to the inmates and the Institution.

In view of this, as well as the excessive cost incurred in the transfer of prisoners to the Institution, and their removal from it, it becomes a question, even at this late day, and after an expenditure of over \$100,000 for buildings, whether it would not be sound policy to abandon a location, combining almost every conceivable drawback to the successful working of the Institution, without, as far as I have yet been able to discover, a single corresponding advantage.

As a question of public economy, I have little doubt, with the financial results of similar institutions, properly situated, before me, that the expenditure on capital account for new buildings would be repaid within ten years.

The Province of Ontario in account with the Provincial Reformatory, from 1st October, 1870, to 30th September, 1871.

Dr.		\$	cts.	\$	cts.	Cr.
To amount revenue deposited to credit of Treasurer, Province of Ontario.....				2,180 43		
“ Salary account.....	9,558 10					400 46
Victualling account.....	5,592 78					23,586 97
Clothing, \$2,773.36; bedding account, \$148.20.....	2,921 56					
Farm, \$653.35; stable account, \$67.57.....	720 92					
Freight account.....	312 62					
Furniture, \$305.65; tool account, \$227.70.....	533 35					
Soap and cleaning, \$233.18; light account, \$176.13.....	409 31					
Chapel and School account.....	250 78					
Repairs ordinary account.....	887 96					
Maintenance of Buildings account.....	235 14					
New Construction account.....	1,149 26					
Postage, \$32.26; stationery, \$63.01; incidentals, \$346.47.....	441 74					
Convicts' Travelling Allowance account.....	364 00					
Officers' Travelling Expenses account.....	108 25					
Hospital account.....	90 85					
Rent account.....	72 00					
Carpenter Shop.....	12 15					
Blacksmith Shop.....	92 80					
Cooperage.....	129 66					
Garden.....	6 50					
Balance.....				23,889 82		2,180 43
				97 61		
				26,167 86		26,167 86

 PROVINCIAL REFORMATORY, PENETANGUISHENE.

ESTIMATE OF EXPENDITURE FOR THE YEAR 1872.

Salaries: Warden	\$1,600 00	
2 Chaplains, at \$800	1,600 00	
Deputy Warden, Clerk and Storekeeper.....	850 00	
Surgeon	400 00	
Steward ..	400 00	
5 Keepers, who combine duties of trade instructors, at \$400 ..	2,000 00	
3 ordinary Keepers, at \$360	1,080 00	
Farmer	400 00	
Stable Keeper.....	260 00	
1 Day Guard	260 00	
2 Night Guards, at \$2.60	520 00	
Gardener.....	260 00	
Gatekeeper.....	260 00	
Temporary assistance.....	70 00	
		9,960 00
Rations.....	5,000 00	
Clothing, \$2,800, and Bedding, \$500.....	3,300 00	
Farm, Farm Stock, and Stables	600 00	
Hospital.....	150 00	
Chapels and School House	200 00	
Soap, Cleaning and Light	250 00	
Furniture, Tools, and Shop Fixtures	750 00	
Repairs, ordinary.....	500 00	
Convicts' Travelling Allowance, 508.....	400 00	
Officers' Travelling Expenses	200 00	
Postage, Stationery, and Incidentals	400 00	
		11,750 00
		<hr/> \$21,710 00

ASYLUMS FOR THE INSANE.

The number of insane persons confined in the several asylums in the Province, and the respective asylum residence of the same on the 30th September, 1871, were as follow :—

	Men.	Women.	Total number in Asylums on 30th Sept., 1871.
Asylum for the Insane, Toronto.....	288	309	597
Asylum for the Insane, London.....	207	250	457
Asylum for the Insane, Kingston.....	161	151	312
	656	710	1366

In addition to the number above stated I have knowledge of 61 insane persons, imbeciles and idiots, as being in confinement in the County Gaols on the same date, which makes a total of 1,427 persons of unsound mind in the Province on the 30th September, of whom I have official cognizance. A comparison of these figures, with the returns of last year, gives the following result :—

	Men.	Women.	Total number in Asylums on 30th Sept., 1870.
Toronto Asylum	227	302	529
Malden do. } now	121	123	244
Orillia do. } abandoned	46	74	120
Kingston do.	192	115	307
	586	614	1200

There were also 56 insane persons, imbeciles and idiots, in the gaols on the same day, making a total of 1,256 against 1,427 now reported.

The following summary shews the number, and distribution of all insane persons under Asylum residence on the 31st December, 1861, ten years prior to the period now reported upon :—

	Men.	Women.	Total number in Asylums on 31st Dec., 1861.
Toronto Asylum and University Branch.....	180	237	417
Malden do.	112	90	202
Orillia do.	20	24	44
Kingston do.	42	21	63
	354	372	726

The figures given in these tables show an increase of 166 insane persons in the several Asylums of the Province over the preceding year, and 640, or no less than 88.20 per cent. over the number in confinement, on the 31st December, 1861.

As the belief, which would seem to be confirmed by the foregoing statements, obtains to a very great extent, that insanity is not only alarmingly on the increase in this Province, but very much in excess of the ratio of increase of population, and is also more prevalent in this than in other countries, it is proper that the subject should be here examined, and that *facts* and *figures*, in so important a matter, should take the place of vague *conjectures*. In this relation it is a matter of regret that we have not yet received a reliable census of the number of insane persons maintained in private houses, upon which, together with those in asylum residence, a strictly accurate basis of comparison may be formed.

But, as the provision made by the Province of Ontario, within the past two years for the accommodation of insane persons has been of the most liberal character, in which respect she now stands in the very foremost rank among civilized nations, it may be taken for granted that there are now as few *urgent* cases of insanity that have not been placed under Asylum treatment as in any country in the world.

The census returns in respect to population have just come to hand, placing the population of the Province at 1,620,842, which number would give 1 insane person under Asylum accommodation for every 1185 of the population; if however we assume that there are in addition to those in Asylums, a sufficient number in private families to make the total number of insane in the Province 2,000, even then the relative proportion of the insane to the population would only be 1 in every 810.

A comparison of these figures with the returns of the number of insane persons in Scotland, given by the Board of Commissioners of Lunacy for 1861, is largely in favour of Ontario, thus:—

The number of insane that year in Scotland in public and private asylums, poor-houses, including 1549 in private dwellings under the supervision of the Commissioners, was 6304 in a population of 3,062,294, or 1 insane person to every 485 of the population.

In 1861, England had a population of 20,119,314, in which year there were 39,647 insane persons in the public and private asylums and workhouses, including also 6,238 in private houses, or 1 insane person to every 507 of the population; in 1869 the number had increased to 53,177, or 1 to every 411 of the population. On the 1st October, 1870, the number of insane in the State of Massachusetts was reported to be 1 to every 480 of the population.

The latest returns that I have knowledge of, give one to every 800 in Holland, 1 in 795 to France, and 1 in 819 to Belgium.

It will thus be seen, that in proportion to the population, the insane in this Province are relatively less, with one exception, than in any of the countries named. But if we examine the subject in relation to the ratio of increase of insanity to that of population, we find that in 1861 when the population of the Province was 1,396,091 that there were only 726 insane persons in the several Asylums, or 1 in every 1903 of the population, whereas it is now shewn that, in 1871, with a population of 1,620,842, the number of insane in Asylum residence is equal to one in every 1185. This, however, is easily accounted for when we reflect that till within the past two years, the Asylum accommodation of the Province was entirely inadequate to meet the demands made upon it, and in consequence, a large number of insane persons had to remain in private houses, or in County Gaols until deaths and discharges made room for them in the Asylums, and then, alas! only too often to swell the list of incurable chronics, from want of prompt Asylum treatment.

Insanity, therefore, in my opinion, is not increasing in a greater ratio than the ordinary advance of population warrants, and the humane and liberal policy of the Government and Legislature, in the provision of Asylum accommodation, will have a tendency to restrict any abnormal increase, and possibly to reduce the relative ratio of the past ten years.

DISTRIBUTION OF INSANE.

With a view to the proper distribution of insane persons in the three Asylums of the Province, I addressed the following communication to the Provincial Secretary on the 17th December last, embodying certain suggestions and recommendations thereupon.

"The undersigned has the honour to bring under the consideration of His Excellency's Government the desirability of apportioning certain Counties in the Province to each of the Asylums for the insane, situate at Toronto, London and Kingston, with a view to obtaining an equal distribution of the beds in these three Institutions. To accomplish this, he would recommend the following apportionment, based upon population and proximity of the localities named to the respective Asylums, as well as to the capacity of the several Institutions to receive insane persons, viz. :—

LONDON ASYLUM—WESTERN DIVISION.

Name of County.	Distance of County Town from Asylum.	Population of Counties in 1861.
Essex.....	112 miles.	25,211
Elgin.....	16 "	32,050
Kent.....	65 "	31,183
Lambton.....	61 "	24,916
Middlesex.....	0 "	48,736
Norfolk.....	75 "	28,590
Oxford.....	23 "	46,226
Brant.....	55 "	30,338
Huron.....	68 "	51,954
Perth.....	29 "	38,083
Bruce.....	125 "	27,499
Haldimand.....	97 "	23,708
London City.....	0 "	11,555
Waterloo.....	55 "	38,750
		458,799

TORONTO ASYLUM.—CENTRE DIVISION.

Name of County.	Distance of County Town from Asylum.	Population of County in 1861.
Hastings.....	112 miles	44,970
Northumberland and Durham.....	70 "	79,767
Ontario.....	26 "	41,604
Peterboro'.....	90 "	24,651
Victoria.....	106 "	23,039
York.....	0 "	59,674
City of Toronto.....	0 "	44,821
Simcoe.....	63 "	44,720
Peel.....	25 "	27,240
Halton.....	40 "	22,794
Grey.....	150 "	37,750
Wentworth.....	40 "	31,832
Hamilton City.....	39 "	19,096
Algoma.....	"	4,916
Welland.....	100 "	24,988
Lincoln.....	60 "	27,625
Wellington.....	48 "	49,200
		608,627

ROCKWOOD ASYLUM.—EASTERN DIVISION.

Name of County.	Distance of County Town from Asylum.	Population of County in 1861.
Stormont, Dundas and Glengarry...	105 miles	58,093
Prescott and Russell.....	137 "	22,323
Leeds and Grenville.....	47 "	59,941
Renfrew.....	172 "	20,325
Lanark.....	87 "	31,639
Carlton.....	104 "	29,620
Frontenac.....	0 "	27,347
Lennox and Addington.....	26 "	28,002
Ottawa City.....	104 "	14,669
Kingston.....	0 "	13,743
Prince Edward.....	40 "	20,869
Nipissing.....		2,094
		328,665

He would also recommend that applications for the admission (under the ordinary process) of insane persons residing in the Counties and Cities named and classified in the above schedules, be made to the Medical Superintendent of the Asylum situate in the District, and that all Lunatics committed to Gaol under the provisions of Statutes of C. 24 Vic. Cap. 13 or C. S. C. c. p. 109 be warranted to the Asylum in which District the Common Gaol is located. He would further recommend that applicants for the admission of paying patients, have the choice of Institutions, and that admission be awarded to such patients in the Asylum selected, provided there are vacancies. With respect to cases of insanity of an urgent character seeking admission, either by ordinary application to the Medical Superintendent or under warrant, in the event of the beds being all awarded in the Asylum set apart for their reception, and there are vacant beds in other Asylums, he would recommend under these circumstances, that such insane persons be awarded admission to the Asylum having vacancies. All of which is respectfully submitted."

The recommendations contained in the above Report, were adopted by Order in Council on 23rd December, 1870, and the several Medical Superintendents were advised of the same. But as the arrangement entered into between the Dominion Government and the Province for the occupation of Rockwood Asylum had reference only to the removal of insane persons found in the Common Gaols, and through the Lieutenant Governor's Warrant, and not for the reception of the insane, under the ordinary process, the Superintendent of the Toronto Asylum was instructed to continue to award admission from the Kingston division, until the policy of the Government in respect to Rockwood Asylum was matured.

ADMISSIONS.

The following table shews the entire operations of the three Asylums in respect to admissions for the year ending 30th September :—

	No. in Asylum on the 30th Sep., 1870.			New admissions during the year (not including transfers).			Total number of Patients under treatment during the year ending Sep. 30, 1871.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Grand Total.
Asylum for the Insane, Toronto.....	227	302	529	115	59	174	342	361	703
Asylum for the Insane, London.....	...	...	...	58	77	135	224	274	498
Transfers from Malden and Orillia Asylums which were closed on the 18th Nov., 1870..	166	197	364						
Asylum for the Insane, Kingston.....	178	134	312	15	19	44	194	153	356
	571	633	1205	188	155	353	760	788	1557

In explanation of the foregoing table, in respect to the discrepancy in the figures connected with Rockwood Asylum, it must be stated that 5 inmates of that institution, in the returns of last year were at that time supposed to be chargeable to the Dominion Government, but it has since been discovered that they have to be maintained by the Province; this, with an error in placing males for females, which did not affect the totals, with the exception of the 5 patients above referred to, accounts for the difference in the returns. The above table shews that 1557 patients were under treatment in the several asylums during the year, viz., 1205 remaining in the Asylums at the end of last year, and 353 new admissions.

The admissions in the past year are in excess of any corresponding period in the Asylum history of the Province, but as Dr. Workman truthfully remarks, "the fact is merely indicative of increased accommodation for patients rather than of positive increase of insanity."

The preponderance of females over males, in Asylum residence, has extended over several years, and still exists, owing to the fact that greater accommodation had been furnished for women in the Branch Asylums at Orillia and in the University Park, Toronto, but now that the same number of beds are provided for both men and women in the three Asylums, the sexes are fast equalizing, as indicated in the admission of 188 men against 165 women for the past year.

It may here be stated that there are three methods of awarding admission to Asylums for the insane:

1st. By the ordinary process under the provisions of Statutes of Ontario, 34 Vic., Cap. 18, Sections 5, 6 and 7,—on the certificate of three medical practitioners, signed and verified by the Mayor or Reeve of the municipality in which the lunatic resides.

2nd. Commitment to Gaol by a Magistrate, on the information of a complainant that the person is dangerous to be at large and likely to injure others or himself, or who is charged with any offence, or is in Gaol on any other than a civil process. After committal an enquiry is held by two Magistrates, one of whom must be the Chairman of the Quarter Sessions, and two Medical Practitioners, who shall examine the prisoner, and if he is found to be insane and certified to that effect, copy of warrant of commitment, and answers to a form of queries replied to by the Gaol Surgeon are transmitted by the Sheriff to the Provincial Secretary's Department, where the sufficiency and formality of the papers are ascertained prior to the recommendation of the Attorney-General for the issue of His Excellency's warrant of transfer to an Asylum. All such cases, before being finally disposed of pass through my office for any comments suggested by personal knowledge of the case, gained in my visits of inspection, both in respect to the fitness of the person for Asylum residence and whether possessed of such property or means as will maintain him or contribute towards his support in the Asylum, and for report as to which of the three Asylums admission shall be allotted.

A third Class of admissions is in the case of prisoners tried for an indictable offence, and acquitted on the ground of insanity, when upon the receipt at the Provincial Secretary's Department of a certificate of the finding of the jury, His Excellency's warrant issues for the removal of the prisoner from Gaol to an Asylum.

The following summary shows, respectively, the number of insane persons awarded admission to Asylums under the ordinary process, and those committed under the warrant of the Lieutenant-Governor, and the distributions of the same in the several Asylums:—

	No. of Patients admitted under the ordinary process.			No. committed under the warrant of the Lieut.-Governor.			Total No. of admissions for the year ending 30th Sep.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Asylum for the Insane, Toronto.....	84	55	139	31	4	35	115	59	174
Asylum for the Insane, London	33	45	78	25	32	57	58	77	135
Asylum for the Insane, Kingston .....	...	...	...	15	29	44	15	29	44
	117	100	217	71	65	136	188	165	353

These figures shew that of the entire admissions for the year, 217 were awarded under the ordinary process, and 136 by the warrant of the Lieutenant-Governor.

There are defects which, I think, should be remedied both under the ordinary process of admission, and the warrant system. In the former, the statute requires, in relation to the method of granting certificates, "*that such certificate shall state that the inspecting medical practitioners, at the same time, and in presence of each other, examined the patient, and, after due enquiries into all necessary facts relating to his case, found him to be insane.*"

Although the illegal commitment or detention of a sane person in any of the Asylums of the Province is unknown to me, still there is great necessity for not only guarding against such an occurrence, but also of obtaining from each of the medical examiners a distinct and separate statement of the reasons why he considers the person insane, giving the symptoms, delusions, or the insane act that has come under his own observation, uninfluenced by mutual conversation, or the reception of statements each examiner has not discovered for himself.

Under the present method, the person for whom a certificate is required is generally under the special care of one of the medical examiners, and the others are called in to sign the papers. I am of opinion, that the liberty of the subject would be better guarded, and much valuable information obtained, to guide the medical superintendent in the treatment of the case, if the law was amended, requiring each medical examiner to make a separate examination of the patient, and transmit to the medical superintendent a report of the same, giving the reasons why he subscribed to the certificate of insanity.

There also appears to be great necessity for the revision and consolidation of the several statutes, sanctioning the committal of persons to Gaol, either as being dangerous to be at large, indigent lunatics, or in the case of persons committed for a minor offence, when during custody insanity shews itself. There are not only conflicting provisions in the various Acts, but defects which seriously interfere with, and obstruct the process of removal, as well as deficiencies which prevent the obtaining of information in respect to the prisoner, that it is desirable to have, before he is deprived of his liberty, and branded with insanity for life. I am of opinion, that the practice of holding an enquiry for the purpose of granting certificates of insanity in the case of persons committed to Gaol by justices of the peace, and the granting of such certificates without having the relations or friends of the lunatic present, and placed upon oath to give evidence upon all the circumstances connected with the case, is open to very serious objection; for, although in most instances, the general appearance and manner of the person are indicative of an unsound mind, still there are cases when it is necessary to make a full investigation into the previous history of the person and the causes which may have led to his insanity, as well as to obtain information in respect to the property and means of the lunatic, if he is possessed of any. In all cases, the evidence elicited would be of the greatest assistance to the medical superintendent of the Asylum to which it is proposed to send the person. At present, no means exist of procuring the attendance, or defraying the expenses, of such witnesses. I would recommend that provision be made to enable this course to be adopted.

DISCHARGES AND DEATHS.

The following table shews the number of deaths and discharges that have taken place during the year:—

	Total number of patients under treatment during the year.			Deaths.			DISCHARGES.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Asylum for the Insane, Toronto*.....	342	361	703	16	12	28	38	40	78
Asylum for the Insane, London... ..	224	274	498	6	9	15	11	15	26
Asylum for the Insane, Kingston	193	163	356	14	5	19	18	7	25
	759	798	1557	36	26	62	67	62	129

It would thus appear that the average rate of mortality in all the Asylums for the year was 3.96 per cent.; and a further analysis of the table, in respect to sex, shews that the male mortality was 4.73, while the female was only 3.26. A comparison of these figures with the Asylum mortality of other countries, is largely in favour of this Province. Thus, the average mortality in Scotch Asylums for the years 1862-66 was 8.24; English, for the same years, 10.39; while in French Asylums, for the years 1854-1866, the average was as high as 14.03.

The ages of those who died in Asylums during the past year were as follow:—

One 16, one 17, one 19, one 25, two 26, one 28, three 30, one 32, one 33, four 34, one 35, two 37, one 40, two 41, three 42, one 43, four 45, one 46, one 47, seven 48, one 50, one 51, one 54, one 56, seven 57, one 58, one 59, one 61, three 65, one 68, and four 70. Total number of deaths, 62: one had been an Asylum resident for over 22 years, another 17 years, one nearly 16 years, and seven from 10 to 15 years, while thirteen ranged from 5 to 10 years, and eight from one year to 5 years, leaving 31 who were residents for periods under one year.

The discharges from the three Asylums are classified and shown in the following summary:—

	Discharged recovered.	Discharged improved.	Discharged unimproved.	Total Discharges.
Asylum for the Insane, Toronto.....	63	13	2	78
Asylum for the Insane, London.....	23	2	1	26
Asylum for the Insane, Kingston.....	22	1	1	24*
	108	16	4	128

As pointed out in my last Report, the statistics of discharges from Asylums are comparatively valueless as an indication of the general results of Asylum treatment, or the benefits derived from it, unless the entire history and operations of the Institutions are taken into account. When we consider that over 800 of the present inmates of our Asylums are hopeless incurables, whose mental condition is beyond all hope of improvement, I think it will generally be admitted that the operations of the year have been very satisfactory, and will compare favourably with other institutions which have the same method of admission.

The number of applications received by the medical superintendents of the Asylums at Toronto and London, for the admission of insane persons, were as follows:—

Toronto Asylum.....	202
London do	160
	362
Of which there were awarded admission at	
Toronto Asylum	174
London do	135
Rejected	53
	362

The information contained in the following tables will prove interesting, being a summary of the entire operations of all the Asylums in the Province, since the establishment of the Provincial Asylum, on the 21st of January, 1841, up to the 30th September, 1871, a period of 30 years.

Total number of Patients admitted to all Asylums since their establishment:—

Asylum for the Insane, Toronto, including University Branch....	3830
Malden Asylum.....	484
Less transfers from Toronto Asylum.....	199
	285

* In addition to this number one eloped.

Orillia Asylum.....	199	
Less transfer from Toronto Asylum	155	
	—	44
London Asylum.....	498	
Less transfers from Malden and Orillia	363	
	—	135
Rockwood Asylum.....	474	
	—	474
Total number of admissions.....	4768	

Disposals of the above:

Died ¹	1068	
Discharged	2275	
Eloped	59	
	—	3402
In residence on 30th September, 1871.....	1366	

The Nationalities and civil state of the total admissions were as follows:

Nativity.

England	731	
Ireland	1729	
Scotland	703	
Canada	1186	
United States	171	
Other Countries and Unknown.....	233	
	—	4753

The Civil state of the entire admissions was as follows:—

	Men.	Women.	Total.
Married.....	1,029	1,389	2,418
Single	1,364	821	2,185
Unknown .....	.....	.....	150
			—
			4,753

The following Summary shews the Counties or County Gaols from which all the present inmates of Asylums were received:—

Algoma.....	1	Brought forward.....	407	Brought forward	857
Brant	25	Leeds and Grenville.....	29	Simcoe.....	36
Bruce	15	Lennox and Addington.....	16	Stormont, Dundas and Glen-	
Carlton and City of Ottawa...	52	Lincoln	28	garry.....	49
Elgin	29	Middlesex and City of Lon-		Victoria.....	16
Essex	21	don	89	Waterloo.....	23
Frontenac and City of King-		Norfolk.....	26	Welland	18
ston	51	Northumberland and Durham	66	Wellington.....	41
Grey.....	24	Ontario	47	Wentworth and City of Hamil-	
Haldimand.....	22	Oxford	30	ton.....	66
Halton	26	Peel	26	York and City of Toronto.....	198
Hastings.....	27	Perth	38	United States.....	3
Huron	37	Peterboro'	25	Quebec	4
Kent	25	Prescott and Russell.....	11	Kingston Reformatory	10
Lambton.....	27	Prince Edward	9	Penetanguishene Reformatory	1
Lanark	25	Renfrew.....	10	Unknown and transfers.....	44
Carried forward	407	Carried forward.....	857	Total.....	1366

PROPERTY OF INSANE PERSONS AND PAYING PATIENTS.

The total amount received for the maintenance of paying patients for the year reported upon, was \$14,045.30, as follows :

Asylum for the Insane, Toronto	\$12,688 58
“ “ “ London	887 30
“ “ “ Kingston	469 42
	<hr/>
	\$14,045 30

Of the 1,366 patients in residence on the 30th September,—

92	were on the paying patient list at the Toronto Asylum.
18	“ “ “ “ “ London “
8	“ “ “ “ “ Kingston “

118

These figures would indicate that no less than 1,248, or over 90 per cent. of the entire number in Asylums, were non-paying patients. This per-centage, however, does not equally apply to all the Institutions, for we find that the Toronto Asylum, with a population of 597 on 30th September, had 95 patients on the paying list, or a little over 16 per cent., while London had only 4 per cent., and Kingston only 2.50 per cent.

The rates paid for the maintenance of these 118 patients are as follows:—

13	patients at \$1 00 per week.
4	“ “ 1 50 “
49	“ “ 2 00 “
2	“ “ 2 25 “
3	“ “ 2 50 “
3	“ “ 2 75 “
16	“ “ 3 00 “
24	“ “ 4 00 “
4	“ “ 5 00 “
<hr/>	
118	patients. \$2 55 average rate per week.

The management of this branch of the financial affairs of the Toronto Asylum is in a most satisfactory state, and the receipts from paying patients have steadily increased from \$6,534.94, in 1868, with an Asylum population of 518, to \$12,688.58, in 1871, with a population of 597, which shews that while the increase in patients has only been about 15 per cent., the revenue from this source has nearly doubled.

The revenue received from paying patients in the London Asylum has increased a little over the Malden and Orillia returns, although the amount received is still very small, and much lower than it should be; while in Rockwood Asylum the collection of revenue has been almost entirely neglected, chiefly owing to the anomalous position of affairs in that Institution, with the entire management under the control of the Dominion Government, and the award of admissions vested in the Ontario Government. This division of authority in the administration, together with the absence of proper power on the part of the Bursar, largely contributes to the unsatisfactory state of the revenue account.

The mode of admitting such patients to Asylum residence, as are possessed of sufficient property or means to pay for their support while under treatment, being in a very unsatisfactory state, and the method of collecting the charges in certain cases being equally unsatisfactory, I framed the following By-law with a view to remedying the matter, which received the assent of His Excellency the Lieutenant-Governor on the 3rd March.

“ WHEREAS it is expedient to make better regulations to provide for the punctual payment or collection of the charges for maintenance of such Patients as are awarded admission to any Asylum for the Insane, as paying Patients;

The Inspector of Asylums, etc., for the Province of Ontario, in accordance with the pro-

visions of the Prison and Asylum Inspection Act, 1868, with the assent of His Excellency the Lieutenant-Governor of the Province of Ontario, enacts as follows :—

1st. That, before a paying Patient is awarded admission to any Public Asylum for the Insane in the Province, a bond shall in every case be taken to secure the proper payment of such rate as shall be determined upon for his or her maintenance, in which one or more responsible persons shall become liable for such payments.

2nd. That such charges for maintenance shall become due and payable quarterly, in advance, on the first days of January, April, July, and October, of each and every year during the residence of the Patient in such Asylum.

3rd. That when a Patient is received into the Asylum after the expiration of half the current quarter, the broken period, together with the whole of the next ensuing quarterly payment, shall be paid in advance.

4th. That if a paying Patient is discharged from the Asylum, or dies therein, before the expiration of the quarter paid in advance, the amount paid for maintenance for the unexpired portion of the quarter shall be refunded to the party having paid the same.

5th. In fixing the rate of maintenance, due regard shall be had to the means and ability of the applicant to pay for the maintenance of the Patient for whom admission is sought, and such rate of payment shall be agreed and determined upon by the Medical Superintendent and Bursar conjointly, subject to the approval of the Inspector; and shall not include any charge for clothing, which must be furnished by the friends of the Patient.

6th. When application is made to the Medical Superintendent for the admission of a patient who has a father, mother, guardian, committee, or other person legally liable to support such Patient, and able to pay for his or her maintenance, or having relatives, friends, or other persons interested in such Patient, who are able and willing, or morally bound to pay for the maintenance of the Patient, such Medical Superintendent, before awarding admission to the Patient, shall confer with the Bursar, giving him all the information he may have received relative to the means and ability of such applicant to pay for the maintenance of the Patient, on behalf of whom admission is sought; and having settled the annual or quarterly sum to be paid for the maintenance of such Patient, the Bursar shall at once prepare a bond, such as is hereinbefore provided for; and until the same has been duly executed, the Patient shall not be admitted to the Asylum.

7th. In the event of a Patient having been awarded admission to any Asylum as a free Patient, and it is afterwards discovered that the insane person has a father, mother, guardian, committee, or other person legally or morally liable to pay for his or her maintenance, the Bursar shall at once render an account to the person liable for the maintenance and clothing of the Lunatic, from the date of his or her admission to such Asylum; and such person or persons shall, at the same time, be notified by the Bursar that they must provide a bond for the due payment of such rate as shall be determined upon, for the future maintenance of the insane person.

8th. When it is discovered that the father, mother, guardian, committee, relations or friends of an insane person who had been awarded admission to any Asylum as a free Patient, are able to pay for the maintenance of such Patient, and having been duly notified by the Bursar under the provisions of Section seven of this By-law, if such person or persons refuse to furnish the required bond, or become responsible for the payment of maintenance of such Patient, or, if the sureties for the payment of the maintenance of a paying Patient are in default for over one quarter the Bursar shall report such cases to the Inspector; and if, on consultation with the Medical Superintendent, it is found that the insanity of the Patient is of such a character as to admit of his or her being sent home without danger to himself or herself, or to the public, steps may be taken to carry out this purpose.

9th. The Bursars of the several Asylums for the Insane shall, on the 15th day of each month preceding the commencement of each quarter, render an account to each obligor or to such person as he or she may direct, of the amount falling due for the maintenance of the paying Patient, for which he may be liable at the beginning of the next ensuing quarter.

10th. If the maintenance of any paying Patients remains in arrear up to the end of the quarter, the Bursar shall notify all the sureties to the bond; and if the amount continues unpaid at the expiration of the second quarter, steps shall be taken for the collection thereof by process of law.

11th. Two wards in the Asylum for the Insane, Toronto, having been set apart, and

suitably furnished for the reception of certain classes of Patients, admission to such wards shall be subject to the following regulations:—

- a. For board, medical attendance, and general maintenance (with the exception of suitable clothing which must be furnished by the friends of the Patients) of all Patients from the Province of Ontario, the sum of four dollars per week shall be charged; and for Patients from the other Provinces of the Dominion, five dollars per week, payable quarterly in advance, as provided for in Sections two and three.
- b. In all cases the Medical Superintendent shall decide whether the form of insanity, or the habits of the Patient, fit him or her for constant residence in such wards, and he shall exercise a due discretion in this respect.

12th. When the maintenance of a Patient from the Province of Ontario, being a resident of a superior ward in the Asylum for the Insane, Toronto, is one quarter in arrears, and remains unpaid, the Patient may, in the discretion of the Medical Superintendent, be removed into one of the ordinary wards of the Institution; the sureties advised of the same, and steps taken to recover the amount in arrears. And in the cases of Patients from the other Provinces of the Dominion, when one quarter's maintenance shall be in arrears and remains unpaid, the Patient may be removed into one of the ordinary wards; the sureties notified, and steps taken for the collection of the same by process of law, and if the sureties continue in default, at the commencement of the next ensuing quarter, the Patient may be returned to the sureties, or to the place from which he or she came.

13th. Pending the settlement of such claims while the Patient is a resident of an ordinary ward of the Asylum, the charge for maintenance will be at the rate of two dollars seventy-five cents per week, both for Patients from the Province of Ontario and the other Provinces of the Dominion; and this shall be inserted as a condition in the bond, and the amount collected, together with the cost of returning the Patient, in the manner provided for in the bond.

14th. On the death or insolvency of any surety required under the provisions of this By-law, a new bond may be required.

15th. Nothing in this By-law contained shall in any wise be construed to relieve any person or persons, or property legally liable for the maintenance of any Patient from such liability; nor shall the execution of any bond hereinbefore provided for have any such effect, or in anywise interfere to prevent any other remedies for the recovery of moneys owing for such maintenance.

16th. The term "Free Patient," or the admission of any person as a free patient, shall not be construed to mean that such patient or any other person or persons, or property, shall be freed or discharged from any liability to pay for maintenance, under the provisions of 34 Vic., cap. 18, or otherwise, but shall only be construed to mean such a patient as is admitted to an Asylum without the execution of the bond hereinbefore provided for.

ASYLUM EXPENDITURES.

For the purpose of promptly placing before the Legislature the Annual Report upon the operations and management of Public Institutions, the official year of this office begins on the 1st October and ends on the 30th September, while the financial year of the Province, and necessarily of all public establishments, ends on the 31st December. So long as this anomaly exists, accurate fiscal information of each official year's expenditures cannot be given, although accounts prepared in this manner, extending over a series of years, are quite reliable for the purposes of comparison.

A temporary difficulty also exists this official year in presenting accounts for comparison, by the abandonment of Malden and Orillia Asylums before the expiration of the financial year, through which a portion of the respective appropriations for carrying on these Institutions lapsed. Expenditures were also incurred in closing these Branch Asylums and in the removal of patients to London, which are not a proper charge upon ordinary maintenance. The statement of expenditures at the Toronto and London Asylums is appended to the separate reports upon each Institution, which will show, in respect to the Toronto Asylum, that while the estimates for 1871 were based upon 620 patients, being the average number in residence, for which an appropriation of \$80,510 was granted or \$129.85 per patient, that the average for the year was only 578, and the expenditure \$72,289.06, indicating an annual cost of \$125.09 for each patient. The London Asylum accounts for the last three

months of 1870 comprise payment of accounts for a portion of the period at Malden Asylum and the charges incurred in the closing up of that Institution, as well as in the removal of the patients to London, and other expenditures for preparing the new Asylum for the reception of patients, a large portion of which should form no part of ordinary maintenance. The same may be said of the expenditures at Orillia for the same period, which include payment of salaries and wages up to the 31st December, although the Asylum was closed on the 18th November.

The total expenditures for the last three months of the year, at these three institutions, were as follows:—

Malden and London Asylums	\$13,347 32
Orillia Asylum.....	3,638 05
	<hr/>
	\$16,985 37

On the 31st December, \$4,642.32 of the Malden, and \$1,609.05 of the Orillia appropriations lapsed, and \$2,256.22 was paid into the treasury for the sale of Asylum supplies and condemned furniture not removed to London. At the London Asylum, the expenditure for nine months (from 1st of January to 30th September,) was \$41,975.69, with an average number in residence of 436.

In giving these figures, in respect to the London Asylum, it must, however, be borne in mind that all the clothing for the year has been purchased out of the nine months' expenditure, as well as a sufficient stock of certain kinds of stores to last the whole year; besides the purchase of cattle to consume the surplus crop, and other charges, which, in future, will form no part of ordinary maintenance, but which this year will amount to upwards of \$5,000.

Notwithstanding this, the appropriation of \$56,000 will meet the expenditures of the year ending 31st December; and when the accounts paid for other than ordinary maintenance are deducted from the total expenditures, it will be found that the cost per patient will not have exceeded the estimate.

AMERICAN ASSOCIATION OF SUPERINTENDENTS OF ASYLUMS FOR THE INSANE.

This Association held its 25th Annual Session in Toronto, on the 5th, 6th, 7th and 8th of June, on which occasion upwards of forty Medical Superintendents were present, representing nearly every Asylum in the United States, and the several Provinces of the Dominion, among them, several of the most eminent men connected with the Speciality on the Continent.

No better time could have been selected for the meeting of this body in the Province, than, when the enlightened liberality of the Legislature had within the three preceding years at an expenditure of upwards of six hundred thousand dollars, founded a new Asylum for the Insane in the West, capable of giving accommodation to 550 patients, and had fully completed, by extensive additions to the buildings and property, the original design of the old established Institution at Toronto, besides adding three new public institutions to our charities for the benefit of the deaf and dumb, the blind and the idiotic, thus shewing to our guests, on the occasion referred to, and the world at large, that with the rapid strides that have been made in material wealth and prosperity, this Province has not neglected to provide for the unfortunate and afflicted people committed to her care.

A great many papers connected with the subject of insanity, and the treatment and care of the insane, were read and discussed, all of which were calculated to advance psychological science in all its bearings, and to improve the sanitary and structural condition of Asylums and the administration of their affairs in every department.

Of all the subjects discussed, perhaps none will be more fruitful of general good and practical benefit to the insane, than the affirmed opposition and discountenance shewn to the expensive and extravagant structures for the insane which has too much characterized the past, and the unanimous adoption of the principle lately adopted and acted upon in this Province, in the construction of the London Asylum, that Asylums for the insane should be of a plain but substantial character, and while characterized by good taste and furnished with every essential to the health, comfort, and successful treatment of the insane, should avoid all extravagant embellishment and every unnecessary expenditure.

The Association, having visited the Toronto Asylum and other public institutions in

Toronto, adjourned to hold a session at London, where an inspection was made of the institution in that city; and before separating, the following resolutions, respecting the asylums of the Province, and their condition and management, were passed, which are alike satisfactory to the gentlemen specially named and the public at large.

“That our eminent and respected colleague, Dr. Joseph Workman, has won the honour-able position he holds in our speciality by a wise, comprehensive appreciation of the multiform duties of his arduous office and by a courageous energy which has continued unappalled in the face of no slight obstacles we now readily understand after personal inspection of the great institution over which he so worthily presides; we recognize in its vast dimensions, the spaciousness and comfort of its apartments, in the tasteful adornment of its grounds and the systematic provision of out-door occupation and amusements of its patients the serious nature of the problem committed to him, and the masterly skill with which he has solved it.

“That we rejoice in the opportunity afforded us for a thorough inspection of the new Asylum at London, lately opened for occupation under the rare judgment and good taste of our skilled and genial associate, Dr. Henry Landor, with its attractive exterior, its spacious wards, well arranged, amply lighted, comfortably furnished, admirably ornamented, lacking no essential of a complete and attractive home, with not a dollar expended for mere display. It presents a hospital in the true sense of the term creditable alike to the head and heart of its able and experienced Superintendent, and to the liberality of the Government and people who have authorized its construction, as year after year it shall silently perform its great work of Christian charity, the citizens of this Province will find more and more cause to be satisfied with the expenditures so liberally, yet nicely, made, and with the clear head and kind heart to which they have entrusted its management. Fortunate are the people of Ontario that they can point to two such noble hospitals as those at Toronto and London, and to two such able, intelligent and devoted Superintendents as Drs. Workman and Landor.

“We shall return to our respective homes with a more abiding interest and an increased zeal in our chosen calling, for having visited our brethren across the border.

SEPARATE REPORTS

UPON THE

State and Condition of Asylums,

AND THEIR

OPERATIONS FOR THE YEAR ENDING 30th SEPT., 1871.

ASYLUM FOR THE INSANE, TORONTO.

I have again a most favourable report to make of the condition and management of this large Institution. Official Inspection was first made of it in May, on which occasion my visit extended from the 25th to the 29th, and again in September, which occupied three days. Besides these Statutory Inspections, frequent visits have been paid to it during the year for the transaction of business, and on every occasion the entire establishment was found to be admirably clean and well ordered throughout, with good discipline prevailing among the officers, attendants and servants of the Institution, displayed in the regularity and promptness in which the every day duties of the establishment are performed.

The number of insane in the Asylum on the 29th May was 581,—273 men and 308 women, with one man, whose name still appeared on the Register, on leave of absence.

With the exception of 11 vacant beds in the superior ward, all the beds on the female side of the house were allotted, and except two which had been awarded to patients expected that day, were all occupied.

On the men's side there were vacancies for 50 patients, including 13 separate rooms in the superior ward.

I saw every inmate of the Asylum, and personally examined and conversed with many of them, the patients, even in the Refractory wards where their care is attended with considerable difficulty, were all comfortably clothed, and in some corridors they were very tidy and neat in their personal appearance, and quiet and composed in their behaviour.

There was a good deal of crowding in two of the men's day-rooms, with a general disposition shown to huddle together in these rooms, in place of occupying the spacious corridors, in consequence of which, the air was a good deal vitiated. If the same practice did not exist in mid-summer, it would be suggestive of too cold an atmosphere in the corridors. It will be necessary, in order to overcome this defect, that the two corridors referred to should be made more attractive by placing a few comfortable forms and seats, at intervals along the walls.

On the male side, there were only three persons in bed, and on the female, twelve, although some of them had only retired to rest, and were without bodily ailment.

There were only a few cases of restraint in the Asylum, all of the mildest form, and actually necessary for the well-being of the patient, or the safety of the other inmates. One man, who was very violent during excitement, was locked in a single room, with the leather muffs on; two more had on the muffs, but were not secluded, one of them for striking an-

other patient; another, who had very destructive propensities, had on the canvas dress, securing the arms; and on the female side, three women had on the hand-muffs.

The dietary was served on a very liberal scale. The tables in every ward, at dinner-time, were furnished with an abundant supply of good, wholesome food, consisting of boiled beef, hash, soup, and potatoes, with other vegetables. Once a week fish is served.

Complaint was made by the Superintendent that the quality of beef was not up to the requirements of the contract. The Bursar was instructed to notify the contractor, that unless he delivered a good quality of beef, from animals of proper weight, it would be refused, and purchased at his expense.

During this inspection, I found a considerable number of men engaged in out-door employments of various kinds. 23 were employed, under the supervision of the Steward, in draining, ditching, and in preparing the land for spring crops. On the land lately purchased from the Ordnance Department, the process of converting a barren common into a fruitful and productive farm, was progressing in a most satisfactory manner. The acquirement of this land has enabled the Superintendent to increase his working staff considerably, which, without doubt, will have a most beneficial effect upon the patients, and, at the same time, will add very materially to the products received from the farm and garden.

During the spring, a considerable wood surface throughout the Asylum had been repainted, doors grained, and the front fence bronzed, chiefly by the labour of the inmates, and at a very trifling expense. The flooring in one of the corridors was sadly worn, and was recommended to be relaid.

At my inspection in September, the population of the Asylum had increased to 600,—290 men and 310 women, and a few days previous to my visit, it had reached 605. The appearance of the patients, both in respect to cleanliness of person, dress, and general aspect, was very satisfactory.

With the exception of the residents of No. 7 Refractory Ward, the remainder of the patients were very free from excitement, and generally quiet and contented. No patients, either on the male or female side of the house, were secluded, although 4 had on the muffs, while the canvas dress was confined to three.

One male patient, who had a fracture of the leg, received before admission to the Asylum had been awarded, was under restraint in bed, owing to his desire to pull off the bandages.

The bedding, throughout the Asylum, was very clean and well kept, although some of the straw beds, on the male side were very hard from over-stuffing. The extra winter blankets had not then been served out, but the cold nights would soon render it necessary. To guard against injury from falls, a good many epileptic patients had their beds made up on the floor, which does not conduce to the comfort of the patient, or the preservation of the bedding. Some low standing beds, with high sideboards, were recommended to be manufactured, which will overcome the difficulty.

The furniture and furnishings of the Asylum were in good order, and well taken care of. Some corridors, which have rather a bare appearance, require a few additional articles of furniture, which would add to the comfort of the patient and the appearance of the halls.

On this occasion, the health and sanitary condition of the Asylum were very satisfactory. Very few patients were in bed; in most cases aged and feeble persons who had retired to rest. Four deaths had recently taken place, but they were patients of a few days' residence, and of whom it may be said that they were brought into the Asylum to die. Cases of this description have added considerably to the death list during the year, although, with all, the rate of mortality has been unusually small, averaging only four per cent. of the number under treatment. The atmosphere, during the day, in the several dormitories, was very pure, although, in the crowded day-rooms, on the male side, it was rather close. The water-closets, both in the main building and wings, were unusually free from bad odour, with all the water appliances in good order, and an abundant supply of water at all points.

The only accident of a serious nature that occurred during the year in the Institution, was in the case of a male patient who occupied one of the single dormitories in the upper story of the male wing, who, on the night of 30th April, succeeded, with his night-bucket, in breaking the iron upper sash, and before assistance could be got, he dropped to the ground from the fourth story, fortunately on soft ground, although his left thigh was fractured, besides a few scratches he received in his descent. An examination of the broken window revealed a very serious defect, for an Asylum, in the construction of the iron window frame,

and to which the accident was attributable. The iron uprights were only doweled into the upper and lower frames about an eighth of an inch, which were still further weakened and rendered unable to resist force from the inside by the V into which the uprights were doweled, opening to the outside. This defect in most of the windows has been remedied by reversing the window sash.

The general operations of the Asylum for the year were as follow :—

Number of Patients remaining in Asylum on 30 September, 1870.....	529
Admissions during the year.....	174
	<hr/>
	703

Disposed of as follows:

Discharged—recovered	62
Discharged—improved	13
Discharged—unimproved	2
Died	28
Eloped	1
	<hr/>
	106

Remaining in the Asylum 30th September, 1870	597
--	-----

Of the 174 admissions, 116 were by medical certificate under the ordinary process, and 58 were committed under the warrant of the Lieutenant-Governor.

The accounts of the Asylum were audited up to the 1st July. All the entries in the various books were compared with the accounts and vouchers in the hands of the Bursar, and the whole found correct, with the books well and neatly kept.

The statement of expenditure for the year ending 30th September is very satisfactory, and exhibits the lowest rate of maintenance per patient in the history of the Institution, which has been accomplished without the slightest reduction in the dietaries of the Asylum, and in fact greater variety has been introduced into some wards than in former years.

From the accounts herewith appended, it will be seen that the total expenditure for the year was \$72,289.06. As the average number of patients for the year was 578, it is thus shewn that the annual cost of maintaining each patient in respect to food, clothing, and all Asylum expenditure, including salaries and wages, was \$125.09.

The revenue derived from paying patients and articles sold has also much increased, and was for the year as follows:—

Receipts from Paying Patients	\$12,688 58
Articles sold.....	1,232 50
Cash discounts	93 69
	<hr/>
	\$14,014 77

When this amount is deducted from the actual expenditure of the Institution, it is shown that the cost to the Province of maintaining the Asylum for the year ending 30th September, 1871, was only \$58,284.29.

From four to five thousand dollars of the appropriation for maintenance for 1871 will remain unexpended at the end of the year.

The list of paying patients in arrears was minutely examined, and the circumstances of the patient, or his relations or friends, enquired into. Instructions in reference to each case were recorded in the minute book for the guidance and action of the Bursar.

The case of a patient, possessed of considerable property in the United States was brought under the notice of Government. Custodians of his property had been appointed by the United States courts, and application made by such custodians for the lunatic, but as he had previously been brought before the Court of Chancery for examination, the Court has not yet authorized his transfer, and payment for maintenance is therefore withheld.

Reduction in the rate of maintenance was in some instances made, when it was shown that the parties were unable to keep up the payments, and in some cases, patients, whose friends or relatives had met with reverses and were unable to support the lunatic, were struck off the *paying* and placed on the *free* list.

The estimated expenditure for the year 1872 herewith attached, is placed at \$81,545. Under the heading of "Salaries and Wages" a small increase is asked for attendants. Notwithstanding that the rate of living in every branch of housekeeping has vastly increased, no increase of wages has been given to attendants for years, although in private houses wages have advanced from 25 to 50 per cent.

Considering the laborious and trying nature of the services which Asylum attendants have to perform, and that many of the men are married, with large families to support, no one will deny that they are entitled to the small increase asked for. A number of them have been in the service of the Asylum for years, and being thoroughly conversant with their duties, perform them with satisfaction to the Medical Superintendent.

It will be necessary next year to build a farm-house, barns, and other out-houses, upon the land purchased from the Dominion Government.

The removal of the inflammable wood and coal sheds in the quadrangle has now become a necessity, to enable these works to be done,—I submit for the consideration of the Hon. the Commissioner of Public Works the annexed memorandum upon which to base an estimate.

ASYLUM FOR THE INSANE,

London.

This Institution was taken possession of and occupied on the 18th November, 1870. The transfer of the patients from the Orillia Asylum, comprising 46 men and 73 women, was safely accomplished on that day by steamer to Belle Ewart, Northern Railway to Toronto, and Grand Trunk Railway to London. On the 23rd November, the Malden patients, consisting of 120 men and 123 women, arrived per steam transport to Windsor, and thence by Great Western Railway to London. The total number of patients transferred from Malden and Orillia to the London Asylum was therefore 363, viz.: 166 men and 197 women.

Although the work under the several contracts was very well advanced towards completion before the arrival of the patients, still, owing to the unfinished condition of the building and the want of steam heat in some portions of it, together with the presence of workmen in various parts of the Asylum, the care of the patients under all these adverse circumstances was attended, for the first two months of the occupation, with an unusual amount of trouble to the attendants and very considerable anxiety to the Medical Superintendent. It must also be borne in mind that, on first occupying a new Institution, no matter how complete the design of the plans may have been, actual occupation and use, reveal defects and deficiencies that have to be remedied by degrees. In this respect the London Asylum has had a few difficulties to contend against, generally of a trifling character, but which nevertheless has seriously interfered with the general management of the institution, in which discipline, smooth working, and regularity, are the most important elements in the administration of its affairs. Fortunately, a large number of the Malden and Orillia staffs, who were conversant with their duties re-engaged for service in London, and the most serious of these difficulties were speedily overcome, and the institution placed in good working order.

The operations of the Asylum, in respect to the movement of patients since its occupation to the 30th September, were as follows:—

	MEN.	WOMEN.	TOTAL.
Number of patients transferred from Malden.....	120	124	244
do. do. do. Orillia.....	46	73	119
New Admissions at London.....	58	77	135
	224	274	498
Disposal of the same:—			
	MEN.	WOMEN.	TOTAL.
Discharged cured.....	11	12	23
do. Improved	11	2	2
do. Unimproved	11	1	1
Died.....	6	9	15
	—	—	—
	17	24	41
Remaining in Asylum on 30th September.....	207	250	457

It is thus shown that 135 new patients were awarded admission since the opening of the Asylum — 78 by the ordinary process and 57 under the Lieutenant-Governor's warrant, making a total of 498 under treatment.

One hundred and sixty applications for admission were received by the Medical Superintendent, 135 of which were admitted, and 25 rejected.

The Counties or County Gaols from which the patients were received were as follows :—

Brant	6	Forward	99
Bruce	7	Ontario	1
Elgin	9	Oxford	11
Essex	4	Peel	2
Grey	2	Perth	7
Haldimand	10	Peterboro	1
Halton	2	Simcoe	2
Huron	7	Victoria	1
Kent	4	Waterloo	3
Lambton	9	Welland	3
Middlesex	29	Wellington	2
Norfolk	9	Wentworth	3
Northumberland and Durham	1		
Carried forward	99		135

Twenty-three patients were discharged cured, 2 improved, and one unimproved. The length of Asylum residence of these 26 cases was 2 under a month ; 6 from one to three months ; 4 from three to six months ; 5 from six to nine months ; five from nine months to one year ; three from one to two years, and one nearly ten years.

Fifteen deaths occurred since the opening of the Asylum, or three per cent. of the total number under treatment, which is the lowest rate of Asylum mortality that has come under my notice. The length of Asylum residence of those who died were 3 under a month, 3 under three months, 14 about six months, 4 thirteen years and a half, and one over seven years.

Three Statutory inspections were made of the Asylum during the year: the first on 23rd, 24th and 25th January ; the second on the 24th, 25th, 26th and 27th March, and again on the 16th, 17th and 18th August. In addition to these inspections, official visits were made on three occasions.

The inspection in January was made specially for the purpose of examining into the sanitary condition of the Asylum, it having been reported that an epidemic had broken out which was attributable to bad sanitary arrangements, as well as to the unhealthy location of the institution.

The following report upon this special visit was addressed to the Honourable The Provincial Secretary, on the 28th January.

"I have the honour to report for the information of His Excellency the Lieutenant-Governor, that accompanied by the Government Architect and Engineer, I visited the London Lunatic Asylum on the 23rd instant and remained until the 25th, for the purpose of inspecting the several buildings and works, preparatory to taking the same off the hands of the contractors, as well as to make the usual statutory inspection, examine into the state of the patients and the sanitary condition of the Asylum, but more particularly for the purpose of investigating into the causes which are supposed to have contributed to the presence of a fever of typhoid character among a number of the residents of the Asylum. The various internal structural defects and deficiencies, which are chiefly of a minor kind and must be made good by the contractors, have been fully reported upon to the Honourable the Commissioner of Public Works, and need not be referred to here.

"Taking into consideration that the buildings have only been occupied about two months for Asylum purposes, during a portion of which period the workmen connected with the contracts have been in the house, the several wards, corridors, day rooms, dormitories and other departments of the Asylum were in a most commendable state of cleanliness and order—

the beds and bedding clean, neat and sufficient, the water closets, urinals, lavatories, bathing rooms and sinks thoroughly clean and free from odour, with an abundant supply of water for sewerage and cleansing purposes.

"Although the weather at the time of my visit was excessively cold, the temperature of the buildings was even and comfortable throughout, the heating capacity of the boilers, steam-pipes and coils being found capable of warming every part of the Asylum up to 65, and if necessary, as high as 75 degrees.

"If the absence of offensive smells and odours can be accepted as a proof of efficiency in the system of ventilation, the plan adopted in the London Asylum must be pronounced as perfect as it is possible to have this important part of Asylum construction. The degree of heat (which in this climate is indispensable to effective ventilation) which can be thrown into every room in the building as well as through the entire ground basement, and the provision that is made at all points for the escape of the rarified currents of exhausted atmosphere through the ventilating flues and chimney shafts, render the system of ventilation adopted thoroughly effective. At only one place was a defect observable, which, on examination was traced to the cemented joints of one of the water closet ventilating pipes having become loose, which partially destroyed the downward draft.

"The patients were all well and comfortably clothed, with the exception of a few whom it is difficult to manage; the food served, was of the most wholesome kind, and of abundant supply and variety, and now that the Asylum is reduced to order and discipline, everything apparently is done to make the patients comfortable, and, as far as possible, cheerful and contented.

"Under these circumstances, with all the internal appliances of the Asylum for the observance of cleanliness and warmth, proper ventilation, and the supply of wholesome food, in good working order, it will at once be apparent that the appearance of typhoid fever, even to a limited extent, must be traced to some other source than the absence of proper internal arrangements, or than the mal-administration of its domestic affairs. Although, when it is considered that even in private dwellings with all the best and most effective sanitary arrangements and surroundings, fevers of a typhoid character sometimes prevail, surely it is not to be wondered at, that, in a public Asylum, with the population of an ordinary village congregated under one roof, many of them physical as well as mental defectives, an epidemic of this kind should make its appearance sometimes, if not often. The sources of these fevers in institutions of this description, cannot always be traced to local defects or derangements, for no matter how perfect the sanitary arrangements may be, or what care may be taken to guard against epidemics, the history of nearly every Asylum tells of their existence.

"In the present instance, out of a total population of 385 patients and 65 officers, attendants and servants, residing in the institution, only 5 persons have been attacked with typhoid symptoms, of this number 2 were patients and the remainder attendants. One of the latter, Miss Cox, I regret to say, died. In addition to this, there were, at the time of my visit, nine patients and attendants suffering from diarrhoea; six of a mild form, and of a few days duration, and three with continued fever; all these cases are now reported recovering; and in a letter received from Dr. Landon, under to-day's date, no new cases are reported. While deeply regretting the death of Miss Cox, I have every reason to believe that the fever will not spread, and that those now prostrated with it will soon be convalescent.

"The number of attendants sick, as compared with the total number of residents, leads me to believe that the anxiety, trouble and labour attendant upon the removal of the patients from Malden and Orillia, and the placing of the new Asylum in good working order, has assisted a good deal to produce the sickness. The fact that the drain from the west wing had been broken in by teams passing over it when the filling around the yard was going on, thereby causing for a time the stoppage of one sewer, which may have worked its way into the west tank, is another reason advanced for the prevalence of fever, but if the water was polluted from this cause to such an extent as to cause fever, it is rather remarkable that it should be chiefly confined to the attendants. The drain referred to has been repaired, and the tank in proximity to it closed up, and an examination of the traps showed that the sewerage was all being thoroughly carried off. That the presence of typhoid or any other fever, or illness of any description in the London Asylum, can be traced to the site of the institution or in its surroundings, or in the water in its pure state furnished to the house, is in my opinion as well as in that of the Medical Superintendent entirely without foundation; but in order that the

last named cause, viz., the quality of the water, may be thoroughly tested, samples of the water used have been sent to a practical Chemist for analysis, the result of which examination will be reported to Government.

"The selection of the site upon which the Asylum is erected was made with a view to securing to the fullest extent a healthy location, where all the sanitary requirements in respect to pure water, good drainage, and fresh air could be secured, all of which requisites, together with convenience of position, have been obtained, and are combined in the London Asylum site: indeed it would have been extremely difficult to have acquired a better one, in every respect, around the environs of London, of which locality it was said by Dr. Workman on the occasion of his visiting it, when the erection of an Asylum at that point was contemplated, 'shoot up a rocket and wherever it strikes a good site will be secured.' It is not only surrounded by good roads, but the ascent to the elevation upon which the buildings are placed is gradual and easy. The site is 90 feet above the south branch of the Thames, and 68 feet above the north branch, in a north and south line from the buildings, and considerably over 100 feet above the junction of the two branches of the river at the foot of Dundas street, none of which points are more than two miles and a half distant from the Asylum. From the building to the outlet of the main drain, a distance of 1,500 feet, there is a surface fall of 18 feet, and a fall of the drain bed of 12.25. At a considerable distance from the buildings covered tanks are sunk to enable the sewerage to be utilized, if found practicable. Although about 15 or 20 acres of the 300 comprising the farm property are of a spongy surface after a rain, even this small portion cannot by any possibility be termed *marsh or swamp*, as sand loam is found at the depth of a few inches, and a surface drain with a few thousand tiles will render every part of it thoroughly dry. If any other evidence is wanting to prove that the present sickness is not attributable to this or any other wet land in the vicinity of the Asylum it is only necessary to say that the ground has been completely frozen up, and for the greater part of the time covered over with snow, since about the 1st of December, so that no exhalations could have taken place.

"Although a higher elevation for the buildings could have been got on the present property, it was thought desirable to place them on the present site, not only for the purpose of being below the springs which supply the water to the Asylum but also on account of the site being more protected from north winds; for it must be remembered that in our climate, warmth is just as necessary as pure air, both of which have been secured by building upon the present site."

At my inspection in March, the population of the Asylum had increased to 388; 177 men and 211 women.

Five patients were confined to bed, 2 on the male side of the house and 3 on the female. One female patient was secluded in one of the single rooms in the Refractory ward, owing to her destructive and filthy habits.

I was present at nearly every meal served during my visit, and made a close examination into the working of the associated dining room system, which is a new feature in asylum construction and management on this Continent—the patients filed into the two large rooms used for the purpose; males on one side and females on the other, in the most orderly manner, and throughout the meals the greatest order and decorum prevailed. As far as I have observed I can speak in nothing but terms of praise of the associated dining room system.

The meals of the feeble and sickly patients, as well as of the noisy and refractory ones were served in the ward dining rooms, and dormitories. The food was abundant in supply and variety, and everything of the best quality.

The number of patients on the Register at my September visit was 446—203 men, and 243 women. One of the men (a warrant patient) eloped a few days previous to my visit, but as he had been nearly, if not altogether, restored to sound mind, steps were not taken to bring him back to the Asylum. I saw every patient in the Institution, and examined and talked with a great number of them. They were all well and comfortably clothed, and, with few exceptions they were clean and neat in their persons and clothing. In most of the wards the patients were singularly free from excitement; in the female Refractory wards, however, some of them were very rough and boisterous.

I was present at Divine Service, which was conducted by the Rev. Mr. Smyth, in the

Asylum Hall. Over one hundred and fifty of the patients were in attendance, and conducted themselves with a great deal of decorum.

The health of the Asylum, from the Superintendent's Reports and the general appearance of the patients was eminently satisfactory. Three patients on the male side and five on the female were in bed, two of whom were in the last stages of consumption and the remainder suffering from temporary ailments. Not a single patient was under restraint, and only four had on the canvass dress, which was the only kind of clothing they could not tear and destroy.

The most admirable order and cleanliness prevailed throughout every ward in the Asylum as well as in the various domestic departments. On the male side of the house two of the water closets gave evidence of defective draught.

Representation having been made to the Honourable The Commissioner of Public Works, by the owner of the property adjoining the eastern boundary of the Institution that the Asylum sewerage which is carried into a creek passing through his land had become a nuisance to the neighbourhood, an inspection was made of the same, the result of which may be stated as follows:—The creek above the point where the main sewer empties into it, was quite dry, and had been for two months previous to the inspection; below it the water was dammed back by fallen logs and other *debris*, and a quantity of green stagnant water, no doubt a large portion of it from the sewer, was in the bed of the creek. Only liquid sewage was flowing from the sewer, and no other was then to be seen at its outfall. No bad smell was apparent, at any rate to no greater extent than from an ordinary stagnant pool of water in hot weather. The water both at the mouth of the drain and at the bridge on Dundas street, was quite unfit for the use of animals, but whether the quality and appearance of the water was attributable to the sewage deposits or to ordinary stagnation cannot be stated; in any case, it is very questionable if in a dry season the water could be given to animals whether the drain emptied into it or not. It, however, cannot be denied, that the deposit of the sewerage of a large institution into a water-course without a sufficient current to carry it away, will, in a short time, create a nuisance, and become a just cause of complaint to people living in close proximity to it; and although the grievance may only exist during the summer months when the creek is low, or altogether dry, still something must be done to overcome the difficulty. The continuation of the box drain to some point south of Dundas street, while it will only change the position of the alleged nuisance, will certainly remedy the most serious part of the complaint now made, viz.: the pollution of the water on the complainant's property and at the bridge where cattle are watered. I am however strongly of the opinion that something more permanent, than continuing the box, drain must be done in order to effectually remedy the matter.

From reliable accounts received in respect to the utilization of sewage, as being the most effective fertilizer known to practical agriculturalists, and the extraordinary increase of crops resulting from a distribution of it over lands, I see no reason why a trial of the system should not be made at the London Asylum.

An examination of the levels of that portion of the land surrounding the sewage vault of the main sewer, showed that an area of upwards of forty acres could be placed under irrigation from that source, including a large portion of the garden. I would therefore recommend than an appropriation be asked from the Legislature to enable a large tank to be placed over the vault into which the liquid sewage may be pumped by a wind mill of the same description as those now used for pumping on the Great Western Railway, from which it can be distributed by pipes over the land.

In this manner, that, which is now a nuisance in the summer months could be turned to a great source of profit by an expenditure of about \$2,500, and in the course of time, if this mode of using the sewage was found to be successful and profitable, a small steam engine could be placed to render the system complete.

Owing to the high price of wood at London, it became apparent that the appropriation of \$6,000 for that service would not be enough, and as soon as the laundry and wash-houses appliances were connected with the engine, it was also found that the motive power required for the machinery was not sufficient for the purpose. The following report upon these subjects was addressed to the Commissioner of Public Works:—

“Referring to my Report of inspection of the London Asylum, dated March 25th, and more particularly to that portion transmitted to you, having reference to the necessity of

providing a new boiler and engine for the kitchen and laundry, to supply steam and motive power for the following Asylum Services.

"1st. Steam cooking for the entire institution.

"2nd. Supplying steam to heat all the water required.

"3rd. Steam drying (by coils) in connection with the laundry.

"4th. Steam washing, four cylinders.

"5th. Steam wringing by centrifugal rotation.

"6th. Steam mangling and ironing.

"I have to state that when the kitchen boiler capacity was determined upon, the introduction of the most approved labour-saving laundry appliances had not then been decided, and when the question was brought under your consideration, and their purchase sanctioned, it was thought that the old Malden Asylum engine was of sufficient capacity to furnish motive power for all the purposes indicated. As reported to you in my communication before referred to, not only has it proved quite inadequate, but the amount of steam required for the extra motive power, could not possibly be generated in the kitchen boiler. The furnishing of a 30 horse-power engine and 50 horse-power boiler having become a necessity, offers were received for the same, and finally an order was given to Waterous & Co., of Brantford, for a boiler and engine delivered and put up in full working operation at the Asylum, including all brick work, foundations and all connections and attachments, for \$2,150. The old boiler and small engine have been sold to the contractors of the Blind Institute for \$650, leaving the sum of \$1,500 still due to Waterous & Co. I would respectfully recommend that although no appropriation was made for this unforeseen service, the same be paid and charged to Capital Account.

"I would at the same time most respectfully call your attention to the great saving that would be effected by using soft steam coal in place of wood. Although the Asylum has not been in operation a year, the consumption of fuel since its occupation enables me to estimate the quantity required for the year, which cannot be placed at less than 1,500 cords, which at the present price cannot be laid down for less than \$5 per cord, or a cost, including hauling of \$8,000 a year; an amount which, with the advancing price of wood, may probably be increased, but certainly not reduced. In addition to the cost of wood, there is always considerable expense attending the hauling of it, besides a very large ground space required to put the year's supply upon. With a view to reducing the cost of this large item in the Asylum expenditure, a fair trial was made, for the purpose of comparison, of soft coal, with the following result: 1 ton of coal was equal to $1\frac{4\frac{5}{10}}{100}$ cords of wood, which for the year's consumption would require 1,031 tons of coal in place of 1,500 cords of wood.

"Soft coal can be delivered at the Asylum for \$5 per ton, equal to \$5,155 a year, to which may be added for ovens and other purposes 100 cords of wood, say \$500, which in using soft coal would make an annual cost of \$5,650 against \$8,000 for wood, or an annual saving of \$2,350. But before soft coal can be used it will be necessary to enlarge the back vents of the furnaces, and to insert cast iron pipes in the chimney shafts in place of earthen, with an additional height above the chimney stack; this, with the alteration of the grates and other work, will cost from \$1,000 to \$1,200, but which will more than pay for itself in one year, and in the event of wood becoming relatively cheaper than coal, which is extremely doubtful, the same appliances will answer for wood.

"I would therefore recommend that the alterations thus indicated be authorized."

The recommendations contained in the above report were adopted by Government, and the alterations made. The machinery has now been in operation for over three months with the most satisfactory results. The alteration of the flues to admit of burning coal has also been thoroughly tested and works well. The soft coal was purchased at \$5 and \$5.70, delivered at the Asylum, nut and lump, so that the saving in the change will be fully equal to what was anticipated.

The accounts of the Asylum were audited up to the 1st July and found correct. The expenditure of \$470.85 for making the men's clothes for six months, suggested the propriety of adding a tailor to the staff of the Asylum.

Instructions were given to the book-keeper respecting the payment of certain accounts out of accountable warrant funds, in order to save trade discounts, as well as directions in respect to other accounts.

Although the crops suffered very much from drought, upwards of 12,000 bushels of

roots, besides a very fair quantity of grain, hay and other produce, has been raised on the farm. It became necessary, in order to consume this crop, that a considerable addition should be made to the live stock of the institution. An examination of the Asylum expenditures and a comparison of the same with the appropriation shewed that the sum of \$2,000 could be spared for that purpose, the Medical Superintendent, with the sanction of the Government, was authorized to expend that amount in purchasing cattle to feed at the stall during winter, as well as in the erection of a shed for housing them. The expenditure of this sum, although it will reduce the cost of butcher's meat for 1872, should not properly become a charge upon this year's maintenance, but should be looked upon as the commencement of a system of providing beef, which, I feel convinced will in a few years effect a great saving in this branch of Asylum expenditure.

I would most respectfully recommend, for the consideration of the Honorable the Commissioner of Public Works, that appropriations be asked from the Legislature for the following services on "capital account":—

- 1st. For furniture and furnishings for the Idiot Asylum.
- 2nd. To complete the stocking of the Asylum farms, in respect to live stock, farm implements, &c., &c., &c.
- 3rd. To complete arrangements for protection against fire throughout the Asylum and outside premises.
- 4th. For the construction of a road to the Asylum for idiots and a fence along the same, and to surround the Idiot Asylum, and to complete planting and ornamentation on the Asylum property.
- 5th. Tank, wind-mill and pipes, to enable the sewerage of the Asylum to be distributed over the land.
- 6th. Cattle sheds for stall feeding.
- 7th. To make good deficiencies in various parts of the Asylum, and to pay certain accounts incurred for that purpose.
- 8th. To enable land to be purchased and cottages to be constructed upon the same, for the Asylum attendants.

The last recommendation is, perhaps, the only one requiring a detailed explanation. In respect to which I would say, that while it was necessary for the quietness and retirement of the Asylum that it should have been placed over a mile from the city of London, the location is unavoidably attended with serious inconvenience to many of the married employees who do not lodge in the Institution. Several of this class left their families at Malden, and for others, the cottages immediately surrounding the Asylum were taken, for which the Asylum had to pay a bonus over ordinary rentals, in order to retain the services of skilled attendants.

The leases of these cottages cannot again be renewed, except at an advance, and if the married attendants have to go to the city for houses, the value of their services will be much lessened, while some of them would have to leave the service altogether.

The rent to be received from the attendants, for the cottages recommended, would be equal to eight per cent. on the outlay.

ROCKWOOD ASYLUM,

Kingston.

This Asylum still continues under the direction and control of the Dominion Government.

A resolution was adopted by the Legislative Assembly, at its last Session, affirming the advisability of the Province acquiring Rockwood Asylum property, either by purchase or lease, and a confirmatory resolution passed the Dominion Parliament authorizing negotiations for its transfer to the Province.

Without presuming to anticipate the action of the Legislature in the pending negotiations, I may be permitted to submit what appears to me to be good reasons for the purchase of the property in preference to its occupation under lease. I would first state that the requirements of the Province in respect to Asylum accommodation render it necessary that an Institution similar to those already established in the centre and west, should be provided for the relief of the eastern portion of the Province. The Province is now maintaining over 90 per cent. of the present inmates of this Asylum, and as there is an increasing demand for accommodation in the eastern Counties, it is clear that an Institution, similar not only in respect to the

mode of admission but general management, is just as necessary in the east as at Toronto and London. The position of Rockwood Asylum, and the ready access to it both by railroad and water communication, admirably fits it for the location of the Asylum for the eastern section.

It may also be stated in support of the recommendation to *purchase*, that in all public Institutions of this character improvements both to the buildings and grounds are constantly progressing, chiefly through the labour of the inmates and the Asylum staff, the value of which it would be very difficult to determine, but which nevertheless improves and advances the value of the property. No better proof can be furnished in support of this statement than the fact, that all the work performed during the past three years on the grounds of Rockwood Asylum, through which a barren common has been converted into highly ornamental grounds, with beautiful *parterres*, walks and terraces, has been done by the Ontario patients.

Although the design of the structure and the material and workmanship are of a far more costly character than the country requires, or modern views in respect to such buildings demand, it is fair to presume, that the cost to the Province of providing Asylum accommodation at London on the most complete scale will enter largely into the negotiations for determining the amount to be paid for Rockwood Asylum.

The defects of the building in respect to heating and ventilation, more particularly referred to in the last Report of Dr. Dickson, Medical Superintendent, can be overcome by a limited expenditure of money; but the mistake of placing so large an institution on the few acres of barren land which surround it, was a blunder of the most serious character, and one which will add very considerably to the cost of maintaining the insane as compared with London Asylum, which should be taken into account in the valuation of the property.—It is however, desirable that effect should be given at the earliest day possible to the joint resolutions of both Parliaments, for the acquisition of an Institution that will complete the chain of public Asylums in the Province.

The following returns show the entire operations of the Asylum in respect to the movements of patients supported by the Province since the 1st day of July, 1867 :—

	Men.	Women.	Total.
Number of patients in the Asylum on the 1st July, 1867,			
Chargeable to Ontario.....	89	29	118
Admission since that date to the 30th September, 1871..	202	154	356
	<u>291</u>	<u>183</u>	<u>474</u>
Disposal of the same :—			
	Men.	Women.	Total.
Died.....	60	29	89
Discharged.....	50	20	70
Eloped.....	2	0	2
Transferred.....	0	1	1
	<u>112</u>	<u>50</u>	<u>162</u>
		<u>112</u>	<u>50</u>
Remaining in the Asylum on the 30th Sept., 1871.....		179	133
			<u>312</u>

The movements of the patients under confinement in the Asylum on the 1st July, 1867, up to 30th September, were as follows :—

	Men.	Women.	Total.
Number of patients in the Asylum on 1st July, 1867,			
Chargeable to the Province.....	89	29	118
	<u>19</u>	<u>6</u>	
Died.....	19	6	
Discharged.....	10	2	
	<u>29</u>	<u>8</u>	<u>37</u>

Number of patients now in the Asylum who were residents on the 1st July, 1867 81

The Counties or County Gaols from which the entire admissions (including those in residence on the 1st July, 1867,) were received, were as follows :—

Algoma	2	Brought forward.....	177	Brought forward.....	325
Brant	10	Leeds and Grenville.....	11	Simcoe	8
Bruce	4	Lennox and Addington.....	12	Stormont, Dundas and Glengarry	28
Carlton.....	40	Lincoln	11	Victoria	8
Elgin.....	3	Middlesex	10	Waterloo	11
Essex	3	Norfolk	9	Welland	5
Frontenac.....	46	Northumberland and Durham...	15	Wellington.....	5
Grey	9	Ontario	19	Wentworth.....	10
Haldimand.....	5	Oxford	9	York.....	40
Halton.....	1	Peel	8	Malden Asylum.....	5
Hastings.....	20	Perth.....	11	Provincial Lunatic Asylum.....	15
Huron	9	Peterboro'	8	Provincial Penitentiary.....	13
Kent	2	Prescott and Russell.....	6	Penetanguishene Reformatory. ..	1
Lambton.....	7	Prince Edward.....	8		
Lanark	16	Renfrew	11		
Carried forward.....	177	Carried forward.....	325		474

The nativity, religion, social condition and occupation of the entire admission (including those in residence on the 1st July, 1867) were as follows :—

NATIVITY.	Males.	Females.	Totals.
African	1	0	1
Americans (United States).....	3	2	5
American Indians	2	0	2
Canadians	81	31	112
English	22	18	40
Germans	11	5	16
Irish	68	48	116
Scotch	19	18	37
	207	122	329
Not returned.....			145
			474

RELIGION.	Males.	Females.	Totals.
Baptists	5	1	6
Episcopalians.....	54	27	81
Lutherans	11	3	14
Menonists	2	0	2
Methodists	36	22	58
Plymouth Brethren.....	3	0	3
Presbyterians.....	32	20	52
Quakers	2	0	2
Roman Catholics	60	50	110
	205	123	328
Not returned.....			146
			474

The social condition of the entire admissions was as follows :—

	Males.	Females.	Totals.
Married	71	63	134
Single	134	56	190
Not reported .....	...	...	150
			<u>474</u>

The occupations of the same were as follows:—

Barrister.....	1	<i>Brought forward.....</i>	247
Blacksmiths	4	Mechanic	1
Carpenters	6	Painters	2
Carriage makers.....	3	Physician	1
Cabinet maker	1	Plasterer.....	1
Clerk.....	1	Shoe makers.....	8
Coopers.....	2	School teachers.....	7
Cook	1	Spinters	28
Discharged Soldier	1	Seamstresses	15
Engineer	1	Store keeper.....	1
Farmers	60	Servants	10
Gardener.....	1	Sailor	1
Housekeepers	67	Tailors	4
Hunters (Indian).....	2	Tanners	2
Harness maker.....	1	Waggon maker.....	1
Labourers	90	Watch maker	1
Machinist	1	Not reported.....	144
Masons	4		<u>474</u>
<i>Carried forward</i>	<u>247</u>		

The following returns shew the operations of the Asylum, in respect to the movement of Ontario patients, for the year ending 30th September, 1871:—

	Men.	Women.	Total
Number of Ontario patients in the Asylum on the 30th September, 1870	178	134	312
Admission for the year ending 30th September, 1871.	15	29	44
	<u>193</u>	<u>163</u>	<u>356</u>

Disposals of the same :

	Men.	Women.	Total.			
Discharged—cured	16	6	22			
“ improved	1	0	1			
“ not cured	0	1	1			
“ died.....	14	45	29			
Eloped	1	0	1			
	<u>32</u>	<u>12</u>	<u>44</u>	32	22	44
Remaining in the Asylum on the 30th Sep., 1871	161	141	312			

The following returns shew the length of residence in the Asylum of those discharged cured, for the year ending 30th September, 1871 :

	Date of Admission.	Date of Discharge.	Length of Residence.
1	30th June, 1870	7th December, 1870	160 days.
2	17th February, 1870	8th " "	144 "
3	6th September, 1869	10th " "	460 "
4	21st " "	13th " "	448 "
5	9th March, 1870	13th " "	279 "
6	5th November, 1869	13th " "	403 "
7	11th August, 1870	13th " "	124 "
8	4th April, 1870	13th " "	253 "
9	5th November, 1868	13th " "	768 "
10	19th November, 1869	21st " "	398 "
11	13th July, 1870	11th January, 1871	182 "
12	21st May, 1869	13th " "	602 "
13	31st " 1870	18th " "	232 "
14	2nd August, 1870	27th " "	178 "
15	11th October, 1870	11th February, 1871	123 "
16	9th August, 1870	21st April, "	255 "
17	9th September, 1869	21st " "	589 "
18	26th July, 1870	21st " "	269 "
19	18th December, 1869	24th " "	492 "
20	13th August, 1870	4th September, "	387 "
21	13th " "	4th " "	387 "
22	24th December, 1870	5th " "	253 "
23	31st July, 1870	18th " "	432 "

The annexed table shews the length of residence in the Asylum of those who died during the year ending 30th September, 1871.

	Age.	Date of Admission.	Date of Death.	Length of Residence.
	Years.			
1	19	7th June, 1870	October 15th, 1870	130 days.
2	37	31st January, 1863	" 23rd, "	7 years and 265 "
3	40	3rd November, 1865	" 27th, "	5 " 24 "
4	57	27th November, 1869	November 29th, 1870	1 " 2 "
5	26	24th " "	December 10th, "	1 " 16 "
6	32	15th December, 1860	January 27th, 1871	10 " 43 "
7	41	16th August, 1870	February 10th, 1871	" 178 "
8	57	13th May, 1870	March 2nd, "	" 293 "
9	30	6th January, 1871	March 18th, "	" 71 "
10	34	4th August, 1869	" " "	1 " 266 "
11	45	30th July, 1869	April 11th, "	1 " 255 "
12	25	14th January, 1871	" 24th, "	" 100 "
13	37	25th June, 1870	" 29th, "	" 305 "
14	35	22nd November, 1869	May 28th, "	1 " 187 "
15	17	8th January, 1868	" 29th, "	3 " 141 "
16	57	18th April, 1871	June 11th, "	" 54 "
17	45	10th May, 1851	" 15th, "	14 " 36 "
18	65	15th January, 1869	July 27th, "	2 " 193 "

The following summary is a list of the convicts from the Kingston Penitentiary who had become insane while under sentence and were transferred to the Asylum, and on the expiration of their period of sentence as convicts, became chargeable to the Province, having received sentence in Ontario : —

	Date of Expiration of Sentences.
1.....	23rd July, 1859.
2	14th April, 1858.
3	19th February, 1860.
4.....	1st July, 1864.
5	14th November, 1866.
6.....	8th February, 1859.

	Date of Expiration of Sentences.
7.....	25th August, 1864.
8.....	15th March, 1870.
9.....	6th May, 1870.
10.....	11th February, 1870.
11.....	29th April, 1870.
12.....	11th September, 1871.
13.....	14th October, 1867.

Of the above two have been discharged, cured, and one died; leaving 10 still in the Asylums who are supported by the Province.

ASYLUM EXPENDITURE.

DETAILED STATEMENT of the expenditure of the Asylum for the Insane, Toronto, for the year ending 30th September, 1871.

Medical Department :

Medicines.....	291 00	
Medical comforts	13 50	
Beer, spirits and wine.....	2,184 50	
	<hr/>	2,489 00

Household Expenses (Food) :

Butcher's meat.....	10,219 00	
Fowls	273 29	
Fish	426 90	
Flour	7,203 50	
Butter.....	3,514 00	
Barley, rice, peas and meal	891 79	
Coffee.....	760 51	
Cheese	53 33	
Eggs.....	235 07	
Fruit	114 71	
Salt, pepper, mustard and vinegar	136 30	
Sugar.....	2,515 27	
Tea.....	1,733 18	
Potatoes	297 20	
	<hr/>	28,374 05

Bedding and Clothing :

Clothing	2,074 88	
Shoes	706 95	
	<hr/>	2,781 83

Fuel, Light, Scrubbing and Cleaning :

Fuel.....	9,602 03	
Gas	2,122 51	
Oil	156 06	
Brushes, brooms and mops	318 67	
Bath-bricks, blacklead and blacking.....	12 60	
Matches	4 50	
Soap	178 31	
Laundry	628 07	
	<hr/>	13,022 75

Miscellaneous :

Advertising and printing.....	336 92	
Stationery.....	15 00	
Furniture.....	407 89	
	<hr/>	

Carried forward..... 759 81 46,667 63

<i>Brought forward</i>	759 81	466,67 63
Glassware	51 60	
Postages, telegraphs and express	143 94	
Feed and fodder.....	169 00	
Farm	832 26	
Repairs	2,002 97	
Interments	98 00	
Improvements	84 58	
Incidentals.....	35 19	
Amusements.....	93 93	
Clergymen's cab hire.....	73 00	
Furnaces	547 88	
Engine-house	486 61	
Law expenses.....	51 83	
Tobacco	130 71	
Engineer and farm tools.....	83 05	
Ice	60 00	
Library.....	35 75	
Straw	317 32	
Fencing.....	17 09	
Removal of patients	34 50	
Freight.....	55 51	
Smoke-house	44 67	
Officers' travelling expenses.....	42 75	
Salaries and wages	19,369 57	
		25,621 43
		<u>\$72,289 06</u>

DETAILED STATEMENT of the expenditure of the Asylum for the Insane, London, for nine months, from 1st January to 30th September, 1871, inclusive.

Medical Department :

Medicines, medical comforts and appliances.....	343 53	
Beer, spirits and wine.....	1,057 90	
		1,401 43

Household Expenses (Food) :

Soda biscuit.	10 66	
Butcher's meat.....	5,002 50	
Flour.....	3,180 50	
Butter.....	1,561 59	
Barley, rice, peas and meal.....	319 20	
Coffee	183 71	
Cheese	10 36	
Eggs	93 41	
Fruit	549 74	
Fish.....	75	
Salt, pepper, mustard and vinegar	111 23	
Syrup and sugar.....	1,378 96	
Tea.....	870 38	
Vegetables, beans and potatoes.....	72 32	
		13,345 31
<i>Carried forward</i>		14,746 74

<i>Brought forward</i>		14,746 74
<i>Bedding and Clothing :</i>		
Bedding,—Clothing.....	2,658 64	
Shoes	680 35	
		3,338 99
<i>Fuel, Light, Scrubbing and Cleaning :</i>		
Fuel	3,075 65	
Gas,—Oil.....	926 86	
Brushes, brooms and mops	246 44	
Bathbricks, blacklead and blacking	3 80	
Matches	10 50	
Soap	631 41	
Laundry.....	120 06	
		5,014 72
<i>Miscellaneous :</i>		
Advertising and printing.....	306 40	
Stationery	70 66	
Furniture.....	1,176 21	
Crockery and glass-ware and stone-ware,.....	95 74	
Postages, telegraphs and express.....	114 71	
Feed and fodder—farm	2,427 19	
Ice	121 80	
Customs duties	158 30	
Officers' travelling expenses.....	69 50	
Eloping, recovering	1 00	
Freight.....	97 88	
Incidentals.....	235 63	
Interments	198 00	
Removal of patients	28 50	
Repairs, ordinary.....	1,242 97	
Amusement and instruction ..	181 41	
Rent and taxes	112 12	
Tobacco and pipes	148 37	
Shrubs and flowers.....	12 50	
Hardware and tinware.....	750 09	
		7,548 98
Salaries and wages.....		11,326 26
		\$41,975 69

ESTIMATES FOR 1872.

ESTIMATE of the expenditure of the Asylum for the Insane, Toronto, for the year commencing 1st January and ending 31st December, 1872. (For 620 patients.)

Medicines and medical comforts	370 00
Fuel	10,500 00
Butcher's meat	11,000 00
Flour	8,000 00
Butter.....	4,000 00
Beer, wine and spirits.....	2,700 00
Gas and oil	2,250 00
Groceries.....	9,600 00
Bedding and clothing.....	4,000 00
Furniture and furnishings.....	1,500 00
<i>Carried forward</i>	53,920 00

<i>Brought forward</i>	53,920 00	
Laundry and soap	850 00	
Farm	1,200 00	
Miscellaneous.....	2,725 00	
Repairs and alterations ..	2,000 00	
		60,695 00
<i>Salaries and Wages:</i>	No. of officers and employees.	
Medical Superintendent.....	1	2,000 00
Assistant do	1	1,000 00
Clinical assistant.....	1	300 00
Bursar	1	1,400 00
Steward	1	600 00
Matron	1	400 00
Assistant Matron	1	144 00
Engineer.....	1	740 00
Assistant Engineer	1	432 00
Stokers.....	2	480 00
Carpenters	2	1,100 00
Gardener	1 ..	216 00
Assistant Gardener	1	192 00
Porter or Messenger	1	240 00
Baker.....	1	240 00
Tailor.....	1	264 00
Farmer	1	250 00
Ploughman	1	200 00
Night watchers..	3	648 00
Chief attendants	4	960 00
Ordinary male attendants	21	4,128 00

Females.

Ordinary female attendants	23	1,812 00
Night attendants	3	360 00
Cooks	8	744 00
Laundresses	6	444 00
House maids	6	396 00
Seamstress	1	96 00

95

To enable an advance of wages to be given to certain employees.	1,064 00	
		20,850 00
		\$81,545 00

LONDON ASYLUM ESTIMATE.

ESTIMATE of the Expenditure of the Asylum for the Insane, London, for the year commencing 1st January, and ending 31st December, 1872, for 580 patients which includes the estimated expenditures of the Idiot Asylum:—

	\$	cts.
Medicines and medical comforts.	300	00
Fuel, (including Idiot Asylum).....	6,000	00
Butchers' meat.....	7,000	00

Carried forward.... 13,300 00

<i>Carried forward</i>	13,300 00	
Flour	6,500 00	
Butter.....	3,500 00	
Beer, wine and spirits	1,800 00	
Gas and oil.....	1,500 00	
Groceries.....	8,500 00	
Bedding and clothing.....	5,600 00	
Furniture and furnishing.....	1,500 00	
Laundry and soap.....	750 00	
Farm	1,000 00	
Miscellaneous.....	1,500 00	
Repairs and alterations.....	1,500 00	
		46,950 00

Salaries and Wages :

	No. of Officers and Employees.	
Medical superintendent.....	1	2,000 00
Assistant do.....	1	1,000 00
Bursar.....	1	1,200 00
Steward.....	1	600 00
Matron	1	400 00
Engineer.....	1	740 00
Assistant do.....	1	400 00
Stoker.....	1	240 00
Carpenter	1	500 00
Gardener	1	400 00
Assistant do	1	216 00
Butcher	1	192 00
Porter or messenger.....	1	206 00
Baker.	1	300 00
Tailor	1	264 00
Farmer.....	1	340 00
Ploughmen.....	3	900 00
Night watchers.....	2	432 00
Chief attendants.....	4	1,020 00
Ordinary male attendants.....	17	3,432 00

Females :

Chief attendants.....	3	540 00	
Ordinary female attendants.....	15	1,080 00	
Night attendants.....	2	240 00	
Cooks	3	420 00	
Laundresses.....	4	418 00	
House maids.....	9	684 00	
Seamstress	1	120 00	18,284 00
	79		\$65,234 00

ROCKWOOD ASYLUM ESTIMATE.

ESTIMATE of the amount required to cover the support and maintenance of Ontario patients in Rockwood Asylum, for the year 1872.

ESTIMATED average number of patients, 330.

For food, clothing, medical attendance and general maintenance
of 330 patients at \$2.75 per week, or \$143 per annum..... \$47,190 00

ONTARIO INSTITUTION
FOR THE
DEAF AND DUMB,
BELLEVILLE.

This Institution was formally opened for the reception of pupils on the 20th October, 1870 on which day the Principal and his staff of officers and teachers were installed in their respective offices, and a considerable number of pupils were entered, and in attendance. As is generally the case in new institutions, the buildings were reported and supposed to be quite completed and ready for occupation, until actual habitation revealed that the statements to that effect were not substantially correct. In consequence of this, the management of the domestic affairs of the Institution was a good deal obstructed by the presence of workmen in various parts of the building for a considerable period after the opening; and even at the present time mechanics are engaged in making alterations and repairs to work, left by the contractor in an incomplete and defective state, which subject will be more particularly referred to hereafter.

The educational interests of the institution have, however, steadily developed and progressed, until they are now in a most satisfactory state.

Four teachers were appointed at the opening of the first session, when the school was divided into four classes; but towards its close, a proper classification of the pupils required the temporary engagement of another teacher. The very favourable opening of the second session, and the great increase in the number of pupils in attendance, necessitated the formation of a fifth class, and the permanent engagement of a fifth teacher, and now that the number of pupils in residence has reached 110, another teacher will have to be added to the staff to take charge of a sixth class, now being formed. With a view to this, an educated deaf mute young lady has been received into the Institution, for the purpose of qualifying herself to become a teacher.

The very marked progress that a large number of the pupils have exhibited, and the general satisfaction of the parents in this respect, may be accepted as indicating the sound method of instruction that has been inaugurated in the Institution.

The success that has attended the first year's operations of the Institute, while conclusively shewing the necessity that existed for its establishment, gives augury of the great good that it is destined to accomplish in the future. But while the successful establishment of the Institution gives good ground for congratulation, an examination of the following statistical table, giving the number of deaf mutes of school age in each county, and the total number ascertained thus far, from various sources, to be in the Province, will show that there is still a vast deal to be done before the Institution can fully accomplish the design of its foundation:—

COUNTIES.	Number of deaf mutes of school age in each County.	Number who have been placed under instruction in the Ontario Institution.	Number in each County not yet sent to the Institution.
Algoma.....	1	...	1
Brant.....	9	5	4
Bruce.....	6	1	5
Carlton.....	12	3	9
Elgin.....	9	1	8
Essex.....	3	1	2
Frontenac.....	3	...	3
Grey.....	8	2	6
Haldimand.....	2	1	1
Hastings.....	10	6	4
Huron.....	16	11	5
Halton.....	3	...	3
Kent.....	9	...	9
Lambton.....	9	6	3
Lanark.....	5	1	4
Leeds and Grenville.....	3	1	2
Lennox and Addington.....	5	1	4
Lincoln.....	5	1	4
Middlesex.....	21	8	13
Norfolk.....	6	5	1
Northumberland and Durham.....	23	13	10
Ontario.....	8	3	5
Oxford.....	4	1	3
Peel.....	3	2	1
Perth.....	12	5	7
Peterboro'.....	10	1	9
Prince Edward.....	3	1	2
Prescott and Russell.....	3	2	1
Renfrew.....	6	...	6
Simcoe.....	15	6	9
Stormont, Dundas and Glengarry.....	8	...	8
Victoria.....	2	...	2
Wellington.....	12	6	6
Welland.....	10	2	8
Wentworth.....	11	2	9
Waterloo.....	2	...	2
York.....	9	1	8
City of Toronto.....	16	4	12
" Hamilton.....	6	1	5
" London.....	2	1	1
" Kingston.....	2	1	1
New Brunswick.....	...	1	...
	312	107	205

In the summary above given, perhaps some deaf mutes are included who are a little over the school age specified in the by-laws, while, without doubt, some of the number are partially instructed; but, from all I can learn, there are certainly not less than 250 deaf mutes in the Province, who should now be under instruction in this Institution which has been established for that purpose.

Why a greater number of pupils are not sent to the Institute, and the causes that contribute to that result, are subjects for serious consideration, in the correct solution of which depends, in a great degree, the future success of the Institution, not only in obtaining a full knowledge of these causes, but in providing a means whereby they may be overcome.

That any parent or guardian, having a deaf mute child, should *deliberately desire* that child to grow up in total ignorance, and in a state of moral and mental darkness, very few, to the credit of humanity be it said, will assert. But that there are many parents, through force of circumstances, ignorance, or want of knowledge of the real benefit the Province desires to confer upon deaf mutes, whose children are deprived of the means of instruction, no one can successfully deny.

In my last report, I stated that, from information I had received in respect to the circumstances of the parents or guardians of deaf mutes, about 50 per cent. were in such poor

circumstances as to be unable, without assistance from some source, to pay for the board of their children at the Institute, and the cost of their transfer to and from it. I also stated that while about 30 per cent. of the parents or guardians were quite able to pay the cost of board and transfer, another 20 per cent. were in that very indefinite social condition denominated *fair circumstances*, which, in the present instance, may very properly be construed to mean, that while such parents are sufficiently well off to give their ordinary speaking children a good common education, an annual expenditure of from \$80 to \$100, for the maintenance of a deaf mute child while at school, is, in many instances, more than they can do, but when the additional cost of supporting two or three in a family, under such circumstances has to be borne, the effort is entirely beyond their means. It may therefore very safely be assumed that at least 65 per cent. of the parents of deaf mutes stand in need of assistance, in order that they may avail themselves of the provision made by Government for the education of their children. To obtain this assistance, as well as to enable every deaf mute child of school age in the Province to be placed under instruction, three methods are open for selection:—

1st. The enactment of a law, requiring every municipality, in which there are deaf mutes whose parents are unable to send them to the Institution, and support them while there, to pay for the transfer of such deaf mutes to and from the Ontario Institution, and maintain them in respect to charges for board while pupils of the school.

2nd. Making the Institute *free* to all, without any charge for board on the part of the Government.

3rd. The compulsory education of all deaf mutes in the Province.

Before commenting upon these three propositions, it may here be well to state the system that now prevails in the admission of pupils to the Institution, which cannot be better given than by quoting such parts of the by-laws of the Institution as relate to that part of the subject:—

1st. All deaf mute youths of both sexes, between the ages of seven and nineteen, not being deficient in intellect and free from contagious disease, being resident of the Province of Ontario, shall be admitted into the Institution.

2nd. The period of education and instruction for any pupil shall not exceed seven years, and no pupil shall remain in the Institution after the age of twenty-one, unless under special circumstances, and discretionary power in this respect shall be vested in the Inspector and Principal.

3rd. Education as well as instruction in such mechanical manual employments as may be inaugurated in the Institution; books, stationery, maps, and all school appliances, together with bed, bedding, towels and general maintenance (excepting only wearing apparel and food) to be free to all youths specified in Sec. first of this by-law.

4th. Parents, guardians, or friends who are able to pay for the board of pupils, will be charged the cost of food only, which amount will be determined and fixed at the beginning of each Session, half of which amount shall be paid in advance, and the other half before the close of the Session.

5th. Parents, guardians or friends who are unable to pay for the board of pupils shall apply to the Councils of the County, township, city, town, or incorporated village in which they reside, and the Clerk of the municipality shall make application to the Inspector or Principal for the admission of such pupils into the Institution; and the admission will be awarded, on the municipality becoming responsible for board in accordance with terms stated in section 6. The whole question in respect to the inability of the applicants to pay to be determined by such municipality, without reference to the Government or the officers of the Institution.

6th. Indigent orphans to be boarded, clothed, and educated at the expense of the Government, on the application for admission of the municipal corporation in which the orphan resides, with the certificate of the Warden, Reeve or Mayor, and the County Judge attached. Travelling expenses of such pupils to, and from the Institution, to be defrayed by such municipality.

7th. The cost of board for the opening Session is hereby fixed at the rate of six dollars per month, commencing from the date of admission of the pupil; but in all future Sessions the cost of board will be charged for the full annual school term, between the first Wednesday in September and the last Wednesday in June, and no deduction will be made from this charge in consequence of absence or any other cause whatever, except sickness."

In order to shew the manner in which the above regulations, for the admission of certain pupils, have been received and acted upon by the several Counties, the following tabular statement has been prepared, shewing the number of Deaf Mutes that have been placed in the Institution up to the 30th September, and how they are supported:

		SHEWING HOW THEY WERE SUPPORTED.		
Total number of Deaf Mutes in the Institution on the 30th September, and the Counties from which they are received.		Supported by Parents or Guardians.	Supported by Municipalities.	By the Province as Orphans.
Algoma.....	0			
Brant.....	5	1	3	1
Bruce.....	1	1		
Carlton.....	3	2	1	
Elgin.....	1	1		
Essex.....	1			1
Frontenac.....	0			
Grey.....	2		2	
Haldimand.....	1		1	
Hastings.....	6		6	
Huron.....	11	1	9	1
Halton.....	0			
Kent.....	0			
Lambton.....	6	2	3	1
Lanark.....	1	1		
Leeds and Grenville.....	1	1		
Lennox and Addington.....	1			1
Lincoln.....	1	1		
Middlesex.....	8	8		
Norfolk.....	5	3	2	
Northumberland and Durham.....	13	5	8	
Ontario.....	3	2	1	
Oxford.....	1	1		
Peel.....	2	1	1	
Perth.....	5	4		1
Peterboro'.....	1	1		
Prince Edward.....	1	1		
Prescott and Russell.....	2	2		
Renfrew.....	0			
Simcoe.....	6	3	3	
Stormont, Dundas and Glengarry.....	0			
Victoria.....	6			
Wellington.....	6	2	4	
Welland.....	2	1		1
Wentworth.....	2	2		
Waterloo.....	0			
York.....	1		1	
City of Toronto.....	4	3		1
City of Hamilton.....	1	1		
City of London.....	1	1		
City of Kingston.....	1	1		
New Brunswick.....	1	1		
	107	54	45	8

It would thus appear that of the entire number of pupils placed under instruction to the 30th September, 54 were supported by parents or friends, 45 by municipalities, and eight by the Province, as orphans.

If the basis of calculation previously given is correct, as I have every reason to believe it is, whereby it is shown that 65 per cent. of the parents of deaf mutes are unable to pay for the board of pupils in the Institution, it goes to shew that of the entire number of deaf mutes of school age in the Province, (deducting 62 for those over age, already educated and orphans whose support is assumed by the Province,) 250 should now be under instruction in the Institution, of whom 88 should be supported by parents or relatives, and 162 by municipalities. As only 15 Counties have complied with the provisions of the by-laws, 7 in a prompt and efficient manner, and 8 only partially so, conclusive evidence is thus furnished—if the present

method of admission is to be continued—of the necessity of the Legislature requiring every County to support in the Institution such pupils whose parents are unable to do so. I am well aware that this course would be attended with some objections and not a few difficulties, none of which, however, are insuperable.

If Municipal Councils, when applications are made by parents, for assistance to enable them to educate their deaf mute children, will only take a liberal and enlightened view of the matter, there need be but little difficulty in determining what constitutes a proper case for assistance. But if parents who are in what is termed *fair circumstances*, either as tradesmen, mechanics or farmers of limited means, and who, in addition to having large families to support and educate, are afflicted with one or more deaf mute children, surely it is not right that this class should sue *in formâ pauperis* at the council chamber every returning year for the necessary assistance to enable them to educate their unfortunate children. If this should be allowed, then the noble end for which the Institution was established will only be very partially accomplished, and a large proportion of our deaf mutes will grow up in moral and mental darkness.

On the other hand, not a few cases have come to my knowledge since the opening of the Institute, of parents who value the labour of their deaf mute children more than they do their education, and would thus withhold from them the only means of making them useful and intelligent members of society, and would sink a sadly afflicted human being to the level of the brute creation. This view of the case at once suggests the necessity of *compulsory education* in relation to deaf mutes. If the principle holds good in respect to ordinary speaking and hearing children, as the Legislature by its Act of last Session has decided that it does, with how much greater force does it apply to deaf mutes who, in their normal condition of ignorance, are not only unable to communicate with the world at large, but are both morally and civilly irresponsible beings?

It is, therefore, very clear that the means of educating and instructing deaf mutes must *first* be placed within the reach of every parent or guardian, either through the liberality of Municipalities or the Province at large, and when this is accomplished the adoption of the principle of compulsory education will, in all respects, complete a system through which every deaf mute in the Province shall be educated.

Whether the Province, having already expended \$85,000 in the erection and furnishing of the Institution, with an annual Legislative appropriation of from \$20,000 to \$25,00 for entire educational and partial domestic maintenance, should be called upon, in addition to that, to *board* the pupils is a question for the consideration of the Government and the Legislature.

But in order that the matter may be placed before them from a strictly financial stand point, it is only necessary to take into account the loss of revenue that would be sustained by the admission of pupils, *board free*. The present estimate of expenditure is based upon the payment by the Institution of the entire cost of maintenance; all amounts received for the board of pupils to be paid into the Treasury as revenue. Thus an average attendance of 100 pupils, exclusive of orphans, would enable \$6,300 to be paid into the Treasury of the Province as revenue.

It must also be borne in mind that the admission of pupils board free, to the Institution, would largely increase the number, and in consequence a corresponding increase would take place in the expenditures for educational purposes, as well as in all other departments in the Institution. In whatever way it may be best accomplished, I sincerely trust that steps will be taken to place every deaf mute of school age under instruction in the Ontario Institute.

Three official visits were paid to the Institution during the year, in the months of January, May and September, on which occasions the buildings and property of the Institution were inspected, and a minute examination made of the management of its educational and domestic affairs. At the first inspection, which extended over the 24th, 25th, 26th and 27th January, while the educational departments of the Institute and the pupils' dormitories were in a very orderly and well kept condition, a good deal of confusion and untidiness prevailed in the domestic portions of the building owing to their unfinished state and the presence of workmen. The want of a sufficient number of rooms to classify and divide the domestic work was very apparent, and until increased space and proper culinary and kitchen appliances are furnished, perfect order and neatness cannot be looked for.

The appliances for heating the building were most inadequate and defective; not only was the capacity of the steam boiler entirely too limited to generate a sufficient quantity of

steam to heat the cubic space required of it, but the arrangement of the steam pipes throughout the building was without system or principle. In some of the smaller rooms on the first floor the pipe surface was so great as to make the heat unendurable, while in the large rooms in the second and third flats there was great difficulty in getting the temperature in ordinary winter weather up to 50°. In addition to this, the constant and loud cracking of the steam pipes was beyond endurance, even in a deaf mute establishment.

The non-completion of the steam dryers, and the want of steam in the laundry, also caused great trouble and loss; these, with many other deficiencies and defects which seriously interfered with the smooth working and discipline of the Institution, and which were chiefly attributable to neglect on the part of the contractor, were duly reported to the Hon. the Commissioner of Public Works, when instructions were given to have the most serious of them remedied.

The number of pupils in the Institution was 52—39 males and 13 females; the health of the school was excellent; the pupils were neat and clean in appearance and well cared for, and were exceedingly happy and cheerful.

No fixed scale of dietary was determined upon, but the meals were served in a very neat and tidy manner, with an abundant supply of good wholesome fare. During my stay, frequent visits were made to the several class-rooms in school hours, and on all occasions the best order and discipline prevailed, and from personal examination as well as from the reports of Principal and Teachers it was apparent that good progress was being made by the pupils in their studies.

With a view to a better classification of the pupils, the Principal was instructed to place Mr. Watson, formerly a teacher in McGann's school, on the teaching staff temporarily, with a view to a permanent engagement when the number of pupils in residence reached 75.

Several applications for the admission of pupils over the prescribed school age, were received. On examination, I found that several of this class had been under instruction at Mr. McGann's school for a short time, and as it was desirable to complete their education, admission for fixed periods was awarded in six instances.

The rule as to the admission of orphans was suspended in the case of a *half* orphan, whose surviving parent had abandoned her.

Instructions were given in respect to the purchase of certain articles of furniture, school appliances, &c., and the opening of a carpenter shop for the employment of certain pupils, under the direction of the carpenter.

My visit in May occupied three days. There were then 66 pupils in residence,—46 boys and 20 girls. The several dormitories, and the beds and bedding, were examined, and found in admirable order, and very clean and neat, which may be also said of the classrooms, while considerable improvement had taken place in the management of the domestic departments.

Plans for the ornamentation of the grounds, and construction of roads, had been approved of in April, when the work was at once proceeded with. At my visit on this occasion, the work was well advanced, and, whether in respect to the plans, or the manner in which the work was being performed, under the superintendence of Mr. Englehardt, the whole met with my entire approval. The straight road leading through the grounds to the Institution was abandoned, and two curved avenues substituted, which much improved the approach to the buildings.

The farm and garden were in as good order as the bad condition of the land and the dry season would admit of.

The purchase of books, and the setting apart of a room for the purpose of a library and reading-room, were approved of, and at once acted upon.

The temporary engagement of a drawing master, to instruct such of the pupils as the Principal thought had a taste for drawing, was approved. As the session was about to close, application was made to the managers of the several railways in the Province to grant half fare or return tickets to the pupils passing over their lines, which request was acceded to by every railway, and, in some instances, the same concession was made to officers of the Institution and parents accompanying pupils to or from the Institution, or when paying a visit to it.

At my September inspection, which extended from the 10th to the 13th, the second session of the Institution had commenced four days previous to my visit. The attendance of 74 pupils so early in the session, with advices that the number would be much increased during

the week, was very satisfactory. I saw and made personal enquiries in respect to each pupil.

Several applications for the admission of pupils, whose parents were unable to pay for their board, were received,--the councils of the municipalities in which they resided having refused to comply with the provisions of the by-law, and in three cases children had been sent forward without the proper papers from the council. In the former cases admission had to be refused, and in the latter, the Principal was instructed to communicate with the respective corporations, requesting them to become responsible for the board of such pupil. The various class rooms were visited, and the classes examined. Owing to the number of new admissions, and the short period that the scholars had been under instruction, the grading and classification of the pupils had not been completed; but examination, with a view to this, was being made by the Principal and teachers.

A personal examination of some of the pupils confirmed the opinion expressed in my previous report, of the desirability of forming an articulation class at the earliest possible day. From ten to fifteen pupils of the present number in attendance could be placed in such a class. The Principal was requested to give the matter his earnest consideration, and report upon the best method of giving effect to the suggestion. His recommendations thereon, which are embodied in his annual report, I fully concur in, and steps will at once be taken to give effect to the recommendation.

The accounts of the Institution were audited up to the 1st July, and found correct. Instructions, with a view to simplifying the method of keeping the accounts, and at the same time exhibiting fuller details, were given to the book-keeper. The accounts, in a detailed form, from the opening of the Institution up to the 30th September, are herewith annexed. As the estimates prepared and submitted to Parliament, and upon which the appropriation of the present year was based, were necessarily of an approximate character, they will be somewhat exceeded by actual expenditures.

The cost of maintenance for the year is shewn to be \$21,605.48, but the accounts include expenditures, which are not a proper charge upon ordinary maintenance, which, in future will be excluded from the accounts. Deducting the revenue derived from the board of pupils (\$1,842.87), the cost to the Province of maintaining the Institution was \$19,762.61.

I also transmit an estimate of the expenditure for 1873, which is prepared with a view to the exercise of the utmost economy in every department, consistent with the efficient management of the affairs of the Institute.

As it is most desirable that many of the lads sent to this Institution should, at the earliest day possible, be placed under instruction in some mechanical pursuit, I would most respectfully recommend, for the consideration of the Honourable the Commissioner of Public Works, that an appropriation be asked to enable a workshop to be erected that will give sufficient space for the following trades and services:--carpenter shop, shoe shop, tailor shop, with a dormitory in the same building for male servants.

An appropriation for the following requirements on capital account is respectfully recommended:--

- 1st. Workshop as above described.
- 2nd. Additional kitchen and store-room space, with a cooking range for the kitchen.
- 3rd. New eave troughs for the main building.
- 4th. To complete the fire protection appliances of the Institution,
- 5th. To complete ornamentation and planting.
- 6th. Additional furniture for various parts of the building, and stock for the farm, as per memorandum transmitted to Public Works Department.

I also beg to bring under the consideration of the Government the great necessity that exists for providing a few cottages, in close proximity to the Institution, for the married teachers, as well as for the engineer and farmer. The distance that the Institution is placed from the town, and the importance of having the engineer and farmer at all times within call, render it absolutely necessary that these two officers should be provided with cottages near the premises. The same reasons, in a lesser degree, apply to the teachers, who would pay rent for the cottages built by Government. I therefore trust that an appropriation will be granted for this purpose.

Before closing this, my first report upon the Institute for the Deaf and Dumb, I have pleasure in recording my entire satisfaction with the manner in which Dr. Palmer has dis-

charged the duties pertaining to the position of Principal during the past year. To the zeal, energy, and good judgment displayed by him in the general management of its affairs is attributable, in a large degree, the success that has attended the first year's operations of the Institute. Mr. McGann, from his long and intimate acquaintance with the deaf mutes of the Province, and their wants, has also rendered good services to the Institution.

The other officers and teachers have performed their duties faithfully and well.

A detailed statement of the expenditure of the Institution, Belleville, for the year ending 30th September, 1871, is herewith annexed.

	\$	cts.	\$	cts.
Medical Department—				
Medicine and medical attendance	394	76		
Medical comforts.....	20	80		
			415	56
Household expenses (food)—				
Butcher's Meat.....	1,490	83		
Flour	693	84		
Butter	699	14		
Barley, Rice, Peas and Meal.....	82	77		
Coffee	95	51		
Eggs.....	154	69		
Fruit	273	11		
Fish	91	08		
Salt, Pepper, Mustard and Vinegar.....	135	11		
Syrup.....	62	25		
Sugar	547	38		
Tea.....	272	06		
Potatoes and Vegetables	253	93		
Fowls	80	55		
Cheese	30	95		
Groceries, assorted.....	11	55		
			4,974	75
Bedding and Clothing—				
Bedding.....	47	80		
Clothing.....	155	97		
Shoes	169	25		
			313	02
Fuel and Light—				
Fuel	2,864	23		
Oil	148	48		
Candles	9	00		
Matches	2	60		
			3,024	91
Scrubbing and Cleaning—				
Brushes, Brooms and Mops	44	04		
Bathbrick, Blacklead, &c.....	4	03		
Soap.....	143	70		
Laundry.....	110	38		
Scrubbing.....	83	15		
			385	30
Miscellaneous—				
Advertising and Printing	85	50		
Stationery.....	155	29		
Amusements.....	178	00		
Furniture.....	995	33		
Carried forward.....	1,424	12	9,113	54

<i>Brought forward</i>	\$1,414 12	\$9,113 54
Crockery and Glassware	73 38	
Postages, Telegraphs and Express	154 62	
Freight.....	160 30	
Feed and Fodder.....	457 19	
Farm and Farm Stock	1,313 38	
Repairs.....	130 47	
Incidentals.....	646 63	
Internal Ornamentation	206 18	
Construction.....	20 94	
Elopement Expenses.....	5 75	
Officers' Travelling Expenses	146 25	
Ice	13 00	
Carriages	46 00	
Library.....	251 60	
Orphans' Travelling Expenses	5 30	
		5,045 21
Salaries and Wages.....		7,446 73
		21,605 48

ESTIMATE of expenditure, Ontario Institution for the Deaf and Dumb, for the year 1872. (Estimated average attendance, 150 pupils.)

Food	6,000 00
Medicine and medical comforts.....	150 00
Bedding, furnishing and clothing for orphans	1,000 00
Fuel	2,500 00
Gas and oil	900 00
Laundry—soap and cleaning.....	370 00
Library—school rooms and class room appliances.....	500 00
Amusements.....	200 00
Farm—feed and fodder	750 00
Furniture	250 00
Repairs and internal ornamentation	500 00
Advertising, printing stationery, postage, telegrams, express charges, freight, &c., &c.....	550 00
Officers' and pupils' travelling expenses.....	250 00
Incidentals	250 00
	14,170 00

Salaries and Wages :

	No. of Officers and Employees.	
Principal	1	1,600 00
Physician.....	1	500 00
Book-keeper and Steward	1	800 00
Matron	1	300 00
3 male teachers, without board and lodging	3	2 400 00
2 " " with " "	2	1,300 00
2 female " " " "	2	500 00
Visitors' attendant.....	1	180 00
Housekeeper.....	1	200 00
Engineer	1	700 00
Farmer.....	1	300 00
Gardener.....	1	240 00
Fireman	1	180 00
Night Watchman.....	1	216 00
<i>Carried forward</i>	18	\$9,316 00

<i>Brought forward</i>	18	\$9,316 00
Carpenter and trade instructor.....	1	550 00
Farm hand and teamster	1	168 00
Messenger	1	96 00
Cook and baker	1	320 00
Assistant do	1	100 00
3 maids, at \$84... ..	3	252 00
3 laundry maids.....	3	252 00
1 gate-keeper.....	1	72 00
1 scrubbing girl, at \$72.....	1	216 00
	<hr/> 31	
		<hr/> \$25,432 00

INSTITUTION FOR THE BLIND,

BRANTFORD.

The site of this Institution adjoins the western limit of the Town of Brantford, south of the Grand Trunk Railway from Goderich to Buffalo, and contains sixty-five and a quarter acres of land, known as Digby Place.*

This site is probably the most picturesque that could be chosen in the Province for the intended purpose. It commands a most extensive view to the west and south, and overlooks the Town, the principal buildings of which are south-east of the site, about one mile distant. Immediately below the elevated plateau on which the building is erected, an unfailing spring of water is available for water supply to the Institution, and access to the Grand River is secured by a road thirty-three feet in width. On the bank of the river there is an acre of land for the erection of any buildings that may be required.

The Institution has been built in the centre of the plateau, and the principal entrance is on St. George's Road, opposite Palmerston Avenue, at which a brick lodge is constructed inside the gates. From the front entrance, opposite Palmerston Avenue, to the building the approach is by a gravelled circular road forty feet in width, with side-walks ten feet in width on each side.

The road extends in a curve round the western end of the building, connecting with the farm road and the rear entrance on North Dumfries Street. The building was designed in the "Tudor style" adapted to modern requirements, a style which now prevails in England, the only innovation being the application of the "Mansard" roof, by which more convenient rooms are available in the third story, and afford additional height in the centre building and the wings.

The front has a south-eastern aspect, is two hundred and twenty feet in extent, divided into a centre building and wings. The centre building is seventy feet in depth, fifty feet in width and three stories in height. The centre projecting tower is seventeen feet square and four stories in height, ninety-feet feet from the ground line to the cornice, and forty-five feet to the top of the iron vane—in all, one hundred and forty feet.

Each wing is seventy feet by forty feet, and two stories in height, connected with the centre by intermediate buildings, forty feet in length, and fifty four feet in depth, and three stories in height. The front building contains the reception, matron's, steward's, teachers, and class rooms, libraries and laboratories on the ground floor; Superintendent's apartments, teachers' class rooms and dormitories, baths and water closets on the second floor, and the music hall, dormitories, tank rooms, etc., in the mansard roofs, as before stated on the third floor. The dormitory accommodation is sufficient for one hundred pupils.

A staircase is constructed to gain access to the fourth stories of the tower from which an extensive view of the surrounding country is obtained.

The rear building consists of a centre building seventy-five feet long by thirty-three feet, and wings fifty feet by twenty feet, the whole is three storeys in height, with a basement, being connected with the main building by a passage thirty-two feet in length by fifteen feet in width—the above being external dimensions. The rear building contains, boiler, store and fuel rooms, water closets. On the ground floor is the kitchen, laundry, scullery, ironing, drying and store-rooms, staircases, etc. The dining rooms, pantries, and wash rooms are on the second floor, and servants' apartments and tank rooms on the third floor. Convenient lifts

* From Public Works Department description.

connect the dining rooms and kitchen, which are directly under the male dining room, the laundry being under the female dining room.

The chimney in the centre of the rear building is seven feet square, exterior dimensions, and seventy-five feet in height, the smoke flues from the boilers being of tile pipes, fifteen inches in diameter, in a space five feet square, rarifies the air drawn from under the floors and through the hollow spaces in the walls from each apartment. By these means the whole of the main building, class rooms, &c., are thoroughly ventilated.

The water supply is procured from a copious spring on the premises and will be forced into the iron tanks in the buildings which are capable of containing twelve thousand gallons; from these tanks the water will be conveyed in iron pipes to each bath, wash room and water closet, kitchen, laundry, boilers, &c.

The rain water from the roofs is conveyed in tile pipes to two brick cisterns, containing twelve thousand gallons each from which the water can be pumped to the laundry tanks for washing purposes.

The building will be heated by steam, on the low pressure principle, passing through circulating pipes round the outside walls, with coils in the large class rooms, music hall, &c.

Arrangements will also be made for steam cooking in the kitchen on the "Morse" principle. Steam will also be used for washing and drying purposes in the laundry.

The building affords accommodation for one hundred pupils, which is considered sufficient for the present, and when increased accommodation is required, it is intended to construct separate dormitory buildings, on the cottage system—the centre building to be then used only for educational purposes. The out-buildings consist of play-sheds, stables, wood-sheds, entrance-lodge, ash-pit, &c. The play-sheds in the rear of the building are sixty feet in length, fifteen feet in width, with latrines at the north end of each shed.

The stable is ninety feet in length and twenty-three feet in width, the centre portion is thirty-three feet in length by twenty-seven feet in width, two stories in height and basement for a root cellar. The wings are one story and a half in height with lofts. The ground floor contains stalls for six cows and four horses, harness-room, carriage-house, &c.

The wood-shed is sixty-eight feet in length by twenty feet in width, each end is enclosed for shelter in winter; the yards in the rear of the building are enclosed by a picket fence.

The entrance lodge is thirty-two feet in length, twenty feet in width and a story and a half in height and contains four rooms. A wood-shed is constructed in the rear, with a fence enclosing the yard, &c.

The whole of the lot is enclosed by a picket fence six feet in height, with gate entrances on Saint George's Road and North Dumfries Street. The buildings are erected of white brick, and cut stone dressings to the windows and doors; the walls are built hollow, being stronger and dryer than if solid; besides, the hollow space will afford means for ventilation, as before described.

The contract, which included main and out-buildings, fences, &c., was let to Messrs. C. W. & T. L. Kempster, of Hamilton, for the sum of sixty five thousand dollars. The whole was to be completed by the 1st November, but owing to various delays, the building may not be ready to be given over by the contractors before the 1st February, but certainly not later than the 1st March, 1872. As it will take a considerable time to place it in order, and furnish it for occupation, I would recommend that the first session of the school commence on the 1st April, when the entire establishment will be ready for the reception of pupils.

To accomplish this, a specification of the furniture and furnishings required for the Institute has been prepared and submitted, which shews that in addition to the \$6,000 appropriated last session of Parliament, \$2,000 more will be required to complete the furnishing.

GENERAL REMARKS.

I am still unable to give an accurate return of the number of blind persons of school age in the Province; but, from the information I have obtained, I do not think the number exceeds one hundred. In giving these figures, however, it should be understood that I have taken it for granted that the Institution is founded solely for the purpose of educating a class of youths who, through a physical defect, cannot, it is assumed, be properly educated in the ordinary schools of the Province. In one particular, however, the end aimed at in the establishment of this Institution materially differs from the main object of ordinary schools, viz.: that in addition to secular education, the pupils shall also be instructed in such mechanical pursuits

as are best fitted to give employment to the blind. Indeed, were it not for this important difference, together with the specialty of musical culture, which must always obtain prominence in an institute for the education of the blind, the proposition to send blind children to the common schools would have much greater force than can, under the circumstances, now attach to it.

For this reason it is of the greatest importance that the mechanical department of the Institute should be organized at once, so that instruction in that branch may go on simultaneously with the ordinary education of the pupils.

In this respect the organization and main end of founding a Deaf Mute Institution entirely differs from that of a Blind. In the former, the moral and physical condition of deaf mutes renders it necessary that they should first be taught how to communicate with the world at large, which can only be done by a long and patient course of training, and through the means of a special science. In the latter, the blind having never lost that means of communication, can at once be placed under oral direction, with a view to acquiring both literary and mechanical instruction. The uneducated deaf mute may at any age be a mere child both in moral and mental capacity, and, until instructed, is an irresponsible being, while the blind, even in an uneducated state, through intercourse with their fellows, are possessed of all their moral and mental faculties and can be taught and instructed, as far as their physical defect will admit, much in the same manner as seeing persons.

While it is important that the Institute for the Blind should be established and organized as an educational establishment, *and not as an Asylum for adult blind persons* or an Hospital for the treatment of disease, still there are a class of blind people, who have already been educated, that might be greatly benefited by a course of mechanical instruction in its work-shops, and in carrying out which no violence would be done to the educational character of the Institution, but which, in fact, would be quite in keeping with the object of its foundation. The lot of the blind is naturally one of the greatest dependence, and in the training of blind youths, it appears to me to be of vital importance that the course or method of instruction should be of an eminently practical character, not only that the evils of their dependent position may be mitigated as much as possible, but that they may be fitted to turn such instruction as is given to them in the Institute to direct benefit, by enabling them to earn a living for themselves. For this reason I would strongly recommend that educated blind youths, in certain cases, be allowed to reside in the Institution for periods, to be afterwards determined, for the purpose of receiving instruction in the mechanical department.

With respect to the mode of admitting pupils, I would suggest that the same method be adopted to obtain admission to the Blind Institute as now exists, or may hereafter be adopted, in the Institution for the Deaf and Dumb.

I am not yet, however, prepared to recommend that the age of the pupils to whom admission shall be awarded, and their period of residence in the Institution for education and instruction, should be the same as in the Deaf and Dumb. I think in many instances when a blind pupil has advanced to a certain stage in the Institution course, that his education may be completed in the Common Schools or at home. The long separation of blind youths from the family circle as well as from the ordinary relations of life, and their constant association in a large institution with persons suffering from the same physical defect, is not in my opinion calculated to foster and encourage a spirit of independence, but has rather a tendency to intensify and bring out the peculiarities of the blind, I think therefore that it would be well to leave the conditions of admission and discharge in abeyance until practical information has been obtained of what is for their best interests, when by-laws regulating the length of residence, as well as for the good government and administration of the affairs of the Institution can be enacted.

The branches of industry best suited to give employment to the blind are very few, and may be enumerated as follows:—Basket, broom, mat-making, and bead-work. The first three afford great variety of employment, and should be adopted in the Ontario Institution.

The following officers and staff will be required to place the Institution on a proper footing at its opening, viz.:—A Superintendent, Steward (who would also perform the duties of Book-keeper), Matron, Physician, Teachers and Master of Handicraft.

With respect to the appointment of a Superintendent, the method of educating the blind differs in so few respects from that of ordinary seeing children that I do not think there is any necessity for securing the services of a person who has had experience in the specialty

as a Superintendent. I would recommend that a thoroughly educated teacher of high moral character, possessing good administrative ability and excellent business habits be appointed to the position. I would further recommend that the appointment be made as soon as possible, so as to enable the person appointed to visit several institutions of a similar kind in the United States, for the purpose of informing himself as to the best method of instruction, as well as in respect to the general management of such institutions. When visiting these places he could secure the services of a thoroughly competent head teacher, and at the same time purchase the most approved apparatus and other school appliances. When the full staff of the Institute is appointed, by-laws will be framed specifying their respective duties.

I would respectfully recommend for the consideration of the Hon. the Commissioner of Public Works that appropriations be asked from the Legislature for the following requirements on "capital account:"

1st. A workshop 80 by 30 feet, with a dye-room and bleaching-room attached, to carry on basket, broom and mat manufactures.

2nd. A sufficient sum to enable three acres of willow roots to be planted.

3rd. To complete the ornamentation, planting and road construction of the Institution grounds.

4th. The sum of \$2,000, to complete the furnishing of the house.

As an accurate estimate of the amount required for the ordinary maintenance of the Institution cannot be prepared until actual expenditures determine what is required for that purpose, I would recommend that the sum of \$15,000 be appropriated to carry on the affairs of the Institute from the 1st April to the 31st December, 1872, based upon the following approximate estimate.

Estimate for the Expenditure of the Institution for the Blind, Brantford, for nine months, commencing 1st April and ending 31st Dec., 1862 :—

Food	\$4,000 00
Clothing for orphans	200 00
Library ..	200 00
Apparatus and appliances	1,000 00
Medicine and medical comforts.....	100 00
Laundry, soap and cleaning	200 00
Fuel.....	2,000 00
Gas	600 00
Furniture ordinary	200 00
Printing forms and advertising.....	200 00
Stable, barn, garden, fence, &c.....	600 00
Internal ornamentation, &c.....	200 00
Sundries	500 00
	<hr/> \$10,000 00

Salaries and Wages.

Salaries and wages.....	50000 00
	<hr/> \$15,000 00

ASYLUM FOR ADULT IDIOTS,

(IN CONNECTION WITH THE ASYLUM FOR THE INSANE,)

LONDON.

The recommendation contained in my last report, that provision be made for idiots by the erection of suitable buildings on the grounds attached to the several Asylums for the Insane, was approved of by Government, and the Legislature, at its last Session, made an appropriation of \$10,000 for the purpose of carrying it into effect. The London Asylum property was selected for the location of the first establishment under this system, and the buildings are now being erected on the high ground in rear of that Institution. The site is in all respects a healthy one, and affords, from its elevated position, a thorough means of drainage into the present sewer. Water will be supplied to it by connection with the tanks of the main Asylum. As the establishment is intended to form a branch of the main Institution, the stores and supplies required for its use will be drawn from that Institution, where also the washing and many other domestic services (cooking excepted) will be performed, and the management and supervision of its affairs will be placed under the Medical Superintendent of the Asylum for the Insane. For this reason it was thought desirable to place it near enough to the Asylum to enable this object to be conveniently carried out, while at the same time it is sufficiently removed from it to effect complete isolation, and a thorough separation of the inmates of the respective establishments.

The structure is built of white brick with stone facings, and comprises a front building 50 × 40 feet, of two stories and raised basement. The basement will be occupied for kitchen, store-rooms and other domestic purposes; the first story for attendants' rooms, patients' dining and sitting rooms; and the upper story for associated dormitories.

Extending from the front building, in the rear, is a two-story structure 41 × 40, with spacious corridors on each flat fourteen feet wide, extending through the centre from front to rear and opening into the main building. Off each corridor there are eight separate rooms—sixteen in all—each room being 11 feet deep by 6 feet wide with 12 feet ceilings, giving 792 feet of cubic space to each patient, with a window opening and door fan-light to each room. A bath-room and water-closet are provided for each flat. To guard against accidents to the inmates, the entire building will be heated with hot air on the Ruttan principle, which is considered the safest with the class of patients that will be lodged in this Asylum. The entire establishment is capable of giving accommodation for 38 idiots of one sex, but if used for both sexes only 32 can be admitted. The style of the building and the internal arrangement of the main structure admits of a wing being added to each side when necessity requires. Provided these additions are of the same dimensions as the rear wing, accommodation would thus be furnished for 32 additional inmates, or altogether for 70 idiots, which is the greatest number that should be placed in one establishment, under the system adopted of making Idiot Asylums branches of the several Asylums for the Insane. I am informed by the Government Architect that the building will be ready for occupation on the 15th February, I have therefore included in the estimated expenditure of the London Asylum for 1872 a sufficient amount to meet the increased cost for maintaining this Institution. In these estimates I have provided for one head supervisor, two ordinary attendants and a cook, with \$400 for additional fuel.

The whole expenditure of the establishment, including the wages of these servants, is based upon the same cost per capita as in the main Asylum, viz., \$112 for each inmate. The expenditure for wages must necessarily be more per inmate than would be the case if the establishment were completed and occupied by 70 inmates, and in consequence a slight increase has been made in the estimate of the London Asylum.

That the design of establishing this Institution may be fully defined and recognized, I may state that the By-laws respecting the admission of patients to the several Asylums for the Insane provide that no Idiots shall be admitted to these Institutions, and the Statute upon which these by-laws are based, provides that before admission to an Asylum is awarded, the person must, on examination, *be found to be insane*. Without entering upon a psychological disquisition as to what constitutes *idiocy* in contradistinction to *insanity*, I will simply state in broad terms, that the Asylums for the Insane were primarily established as hospitals for the treatment, with a view to the cure or improvement of persons afflicted with mental disease.—The end, thus defined, for which Asylums were founded, indicates that persons sent to them must be susceptible of cure or improvement; and although this condition is frequently violated by the admission of patients who often turn out to be incurable chronics, still, until actual residence reveals their mental condition, admission cannot well be refused, unless the probabilities in that direction are very strong, and the indications very apparent.

On the other hand, the *mental* condition of a congenital Idiot cannot be improved, although if subjected to a course of training in early life his habits and mode of living may be bettered in many respects. It is very clear, however, that the latter course of treatment cannot be undertaken in the Institution about to be established, and from which congenital Idiots under twelve years of age must be entirely excluded. That class of defectives can only be successfully treated in an independent institution possessing all the means and scientific appliances of a modern training school for idiots and imbecile children—the establishment of which is required, both in the interests of humanity and public economy; of humanity, because of all the cares and anxieties of life few can compare to the care and anxiety of many a mother in this Province having the charge of an idiotic child; of public economy, because in many instances, if these children are not placed in a training school where they may be taught and fitted to be placed in the family relation, many of them will become permanent charges upon the Province as inmates of an Asylum for adult Idiots.

I am of opinion that the class of idiots first entitled to relief by admission to this Institution, are those who have been committed to the several gaols of the Province as persons dangerous to be at large, and who, under the Statute cannot be admitted to Asylums for the Insane. As their discharge from gaol would, in many instances, be attended with danger to life or property, it is clearly the duty of the Province to provide for them in the same manner as it has done for the insane.

Next to that class, the most urgent cases in private families should be awarded admission; dangerous proclivities or vicious habits always being the test of urgency.

Owing to the limited measure of relief provided, great care and wise discretion must however, be exercised in awarding admission in both instances, or the beds of the establishment will soon be filled by a class of *quiet, harmless* idiots and imbeciles, to the exclusion of proper subjects. Many of this class are now lodged in private houses at the expense of municipalities, who will naturally seek to relieve themselves of the charge, while not a few have been committed to gaols and their discharge therefrom has frequently been recommended by me at my visits of inspection.

Of the 57 idiots and imbeciles returned as being under confinement in the several County Gaols on the 30th September, 1871, probably not over 30 will, on examination, be found to be proper cases for transfer to the Idiot Asylum under the warrant of His Excellency the Lieutenant-Governor.

HOSPITALS AND CHARITIES.

GENERAL HOSPITALS.

The entire operations of the several Hospitals in the Province, for the twelve months ending 30th September, 1871, are exhibited in the annexed tabular statement, shewing the number of patients remaining in Hospital residence on the 30th September 1870, the admissions during the year, and the total number of persons under treatment, with the movements and disposal of the same, as follow :—

	ADMISSIONS.				GENERAL MOVEMENTS.		
	No. of patients remaining in Hospital on 30th September, 1870.	Admitted during the year.	Born in Hospital during the year.	Total No. of patients under treatment for the year ending 30th Sept.	Discharged.	Died in Hospital.	Remaining in Hospital on the 30th Sept., 1871.
General Hospital, Toronto	85	618	.....	703	562	76	65
“ “ Hamilton	54	467	15	536	436	44	56
“ “ Kingston	36	552	16	604	550	20	34
“ “ London	19	191	5	215	186	11	18
Hôtel Dieu “ Kingston	6	194	.....	200	183	10	7
Gen. Protes. “ Ottawa	14	107	.....	121	88	16	17
Rom. Cath. “ do	20	230	.....	250	222	16	12
Gen'l and Marine Hospital, St. Catharines	6	111	4	121	105	8	8
Eye and Ear Infirmary, Toronto	5	53	.....	58	51	.....	7
	245	2,523	40	2,808	2,383	201	224

The above table shews that 2,523 new patients were awarded admission during the year, which, with the number in residence on the 30th September, 1870 (245), and the births (40), made the total number of patients under treatment 2,808.

A comparison of the figures thus given with those of the previous year, shews an increase of 342 patients,—which, with two exceptions, was pretty evenly distributed among all the Hospitals. The number of patients remaining in the Hospitals on the 30th September, 1871, shews a falling off, as compared with last year. The ratio of deaths to the total number of patients under treatment exhibits singular uniformity in both years: thus, the rate of mortality for 1869-70 was 7·42, while for 1870-71 it was 7·31 per cent.

A classification in respect to the sex, religion, and nationality of the patients is given in the following summary :—

	Total number of patients under treatment.	SEX.		RELIGION.			NATIONALITY.					
		Males.	Females.	Protestants of any Denomination.	Roman Catholics.	Other Religion, or not known.	England.	Ireland.	Scotland.	Canada.	United States.	Other Countries.
General Hospital, Toronto.....	703	502	201	567	134	2	248	198	84	139	13	21
“ “ Hamilton.....	536	347	189	312	224	.....	158	167	42	116	30	23
“ “ Kingston.....	604	408	196	385	167	52	107	177	28	217	12	63
“ “ London.....	215	120	95	129	85	1	67	84	10	42	3	9
Hôtel Dieu “ Kingston.....	200	109	91	9	191	.....	8	99	2	61	23	7
Gen. Protes. “ Ottawa.....	121	80	41	120	1	.....	38	33	11	32	1	6
Rom. Cath. “ do.....	250	125	125	9	241	.....	5	48	3	193	1	.....
General and Marine Hospital, St. Catharines.....	121	91	30	35	82	4	25	31	18	31	9	7
Eye and Ear Infirmary, Toronto.....	58	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	2,808	1782	968	1,566	1,125	59	656	837	198	831	92	136

The entire receipts of the several Hospitals for the year ending 30th September, 1871, and the sources from which they were derived, are given in the following statement :—

NAME OF HOSPITAL.	LOCATION.	Balance on hand 30th September, 1870.	Amount received from Government.	Received from Municipalities.	Received from paying patients.	Income from property or investments belonging to Hospital.	Subscriptions, donations and bequests from private individuals.	From all other sources.	Total receipts for the year, including balance on hand.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
General Hospital.....	Toronto.....	2284 95	11260 00	1888 51	1737 58	6247 83	.....	426 00	23784 87
“ “.....	Kingston.....	452 23	4800 00	.....	722 31	56 20	339 36	488 06	6858 16
Hôtel Dieu “.....	do.....	.....	800 00	.....	220 91	.....	832 86	238 42	2092 19
General “.....	London.....	.....	2400 00	823 62	.....	.....	.....	.....	3223 62
City “.....	Hamilton.....	.....	4800 00	2102 47	217 58	.....	.....	.....	7120 05
Rom. Cath. “.....	Ottawa.....	4 56	1200 00	.....	1207 25	.....	132 44	119 43	2663 68
Protestant “.....	do.....	1452 44	1200 00	100 00	362 45	225 00	439 00	449 06	4227 95
General “.....	St. Catharines.....	324 96	1000 00	400 00	.....	48 00	503 75	1105 50	3382 21
Eye and Ear Infirmary.....	Toronto.....	129 04	750 00	100 00	.....	.....	253 22	.....	1232 26
		4648 18	28150 00	5414 60	4468 08	6577 03	2500 63	2826 47	54584 99

From an examination of the above table it appears that the Province was the largest contributor to the funds for Hospital maintenance; the amount paid by Government, \$28,150.00, being nearly 65 per cent. of the entire revenue derived from all sources for ordinary maintenance. While some corporations have aided, to a small extent, the Hospital situated within the municipality, others have given nothing towards its support, and

the total sum received during the year from municipalities, only amounted to \$5,414.60. The amount received from paying patients was \$4,468.08, or not quite 9 per cent. of the total receipts.

The revenue derived from property owned by the several Hospitals was \$6,557.03, but as nearly the whole of that amount was paid out for interest on debts due by the Institution and in liquidation of the same, no direct benefit was received from that source.

Considering the great benefits derived from the establishment of Hospitals in various parts of the Province, the amounts received from "private subscriptions, donations and bequests," are very trifling, and there appears to be great necessity for a special effort to increase the amount.

The annexed tables will show the expenditures in the several Hospitals, classified under the headings of "food, medicines and medical comforts," and "salaries, wages, fuel and all other expenses," with a detailed analysis of the cost of each service per patient in each Hospital.

DETAILED STATEMENT of Hospital Expenditure for the year ending 30th September, 1871.

HOSPITALS.	FOOD, MEDICINE, &c.							SALARIES AND WAGES, FUEL AND ALL OTHER EXPENSES.								
	Beer, Wine and Spirits.	Medical Comforts.	Butcher's Meat.	Flour and Bread.	General Groceries, and Provisions.	Milk.	Total.	Salaries and Wages.	Fuel, Light, and Water.	Bedding, Clothing, Crockery, and Furniture.	Taxes and Insurance.	Repairs.	Advertising, Printing, Postage, etc.	Laundry cleaning and scrubbing.	Other Expenditures not enumerated.	Total.
General Hospital Toronto.	\$ 961 93	\$ 415 89	\$ 1860 34	\$ 839 89	\$ 1740 72	\$ 992 02	\$ 7810 79	\$ 3422 48	\$ 2415 07	\$ 597 50	\$ 825 41	\$ 402 10	\$ 194 60	\$	\$ 598 86	\$ 8456 68
do do Hamilton.	\$ 106 61	\$ 384 23	\$ 716 88	\$ 865 11	\$ 923 86	\$ 427 85	\$ 3484 54	\$ 1577 50	\$ 779 75	\$ 317 62	\$ 500 00	\$ 98 00	\$ 89 37	\$ 108 87	\$ 74 00	\$ 3545 11
do do Kingston.	\$ 77 40	\$ 244 31	\$ 849 71	\$ 583 69	\$ 1272 60	\$ 350 65	\$ 3378 36	\$ 979 10	\$ 815 81	\$ 17 35	\$ 86 25	\$ 695 31	\$ 28 13	\$ 60 53	\$ 302 45	\$ 2984 93
do do London.	\$	\$	\$ 277 02	\$ 225 75	\$ 663 50	\$ 53 14	\$ 1219 41	\$ 1020 00	\$ 330 94	\$ 494 53	\$	\$ 24 33	\$	\$ 30 60	\$ 104 31	\$ 2004 11
Hôtel Dieu, do. Kingston.	\$ 30 63	\$ 99 61	\$ 258 28	\$ 290 40	\$ 431 07	\$	\$ 1109 99	\$ 70 00	\$ 261 86	\$ 24 60	\$ 72 00	\$ 18 15	\$ 5 60	\$ 23 35	\$ 101 75	\$ 579 71
General Protestant Hospital, Ottawa.	\$ 68 26	\$ 170 50	\$	\$	\$ 1466 00	\$	\$ 1704 76	\$ 472 00	\$ 240 23	\$ 111 45	\$ 48 25	\$ 137 58	\$ 34 59	\$ 63 00	\$	\$ 1107 10
Roman Catholic Hospital, Ottawa.	\$ 15 37	\$ 51 74	\$ 356 05	\$ 368 44	\$ 470 55	\$	\$ 1286 15	\$ 59 45	\$ 346 61	\$ 382 11	\$	\$ 8 10	\$ 8 50	\$ 97 09	\$ 168 50	\$ 1070 36
General and Marine Hospital, St. Catharines	\$	\$ 152 00	\$ 68 99	\$	\$ 598 89	\$ 140 80	\$ 869 68	\$ 366 67	\$	\$ 22 96	\$	\$ 426 80	\$ 15 00	\$ 8 86	\$ 311 54	\$ 1091 83
	\$ 1320 20	\$ 2518 28	\$ 4381 27	\$ 3203 28	\$ 7567 19	\$ 1873 46	\$ 20863 68	\$ 7907 20	\$ 5190 87	\$ 1967 52	\$ 1531 91	\$ 1810 43	\$ 375 79	\$ 391 70	\$ 1664 41	\$ 20839 83

	DETAILED ANALYSES OF HOSPITAL EXPENDITURES.						COST OF EACH PATIENT PER DAY.		
	Total number of patients under treatment.	Average stay of each patient in Hospital.	Collective stay of patients in Hospital.	Cost of Food, Medicines and Medical Comforts.	Cost for Salaries, and Wages, Fuel and all other Expenditure, except Food and Medicine.	Entire cost of maintaining Hospital.	Daily cost of Food, and Medicine for each patient.	Daily cost of Salaries, and Wages, Fuel and all other expenses, except Food and Medicine for each patient.	Daily cost of each patient for all Hospital Expenditure.
		Days.	Days.	\$ cts.	\$ cts.	\$ cts.	cts.	cts.	cts.
HOSPITALS.									
General Hospital, Toronto	703	42	29574	7810 79	8450 68	16267 47	26 41 100	28 59 100	55 cts. 32 52 100
General Hospital, Hamilton	533	403	21608	3484 54	3545 11	7029 65	16 12 100	16 40 100	32 52 100
General Hospital, Kingston	604	291 7 100	17583	3378 36	2984 93	6363 23	19 21 100	16 97 100	36 18 100
General Hospital, London	215	21 6 5 100	4680	1219 41	2004 11	3223 52	26 04 100	42 81 100	68 85 100
Hôtel Dieu Hospital, Kingston	200	16	3210	1109 99	579 71	1689 70	34 57 100	18 05 100	52 62 100
General Protestant Hospital, Ottawa	121	50	6134	1704 76	1107 10	2811 86	27 70 100	18 03 100	45 82 100
Roman Catholic Hospital, Ottawa	230	32 2 8 100	8028	1286 15	1070 36	2356 51	16 91 100	13 3 5 100	29 34 100
General and Marine Hospital, St. Catharines	121	22 3 4	2563	869 68	1061 83	1961 51	32 65 100	41	73 65 100

The following tables exhibit the entire operations of all Benevolent Institutions aided by Government grants, and the sources from which funds for their support were received:—

RETURN of particulars required by the Legislative Assembly from all Charitable Institutions in receipt of Government aid in the Province of Ontario, for the year ending 30th September, 1871.

NAME OF INSTITUTION.	PLACE.	Number of inmates in residence on the 1st Oct., 1870.	Admissions during the year ending 30th Sep., 1871.	Total number of inmates.	Discharged.	Died.	Remaining in residence on the 30th Sep., 1871.	CLASSIFICATION OF INMATES DURING 1870 AND 1871.		
								Protestants of any denomination.	Roman Catholics.	Any other religion or not known.
Protestant Orphans' Home and Female Aid Society	Toronto	91	26	117	34	4	79	117	317	22
Roman Catholic Orphan Asylum	Do	221	124	345	92	20	233	6	53	10
Burnside Lying-in Hospital	Do	2	104	106	95	4	7	43	20	25
Magdalen Asylum	Do	25	29	54	24	1	29	16	225	...
House of Providence	Do	128	113	241	84	21	136	...	...	...
Girls' Home and Public Nursery	Do	95	54	149	...	...	...	...	...	...
Boys' Home	Do	46	67	113	...	...	...	...	...	...
Orphans' Home	Do	30	26	56	28	...	28	26	2	28
Roman Catholic Orphan Asylum	Kingston	100	30	130	12	2	116	...	130	9
Orphan Asylum and Ladies' Benevolent Society	Hamilton	35	11	46	9	...	37	37	...	...
Protestant Orphan Asylum	Do	238	21	49	23	...	26	43	6	...
St. Joseph's Orphan Asylum	Ottawa	61	40	101	41	...	59	...	101	...
Do	Do	86	231	317	236	10	71	223	83	11
House of Industry	Toronto	22	230	252	222	...	30	134	115	3
House of Industry and Refuge for Indigent Sick	Do	54	31	85	39	4	42	...	85	...
St. Patrick's Orphan Asylum	Ottawa	...	...	...	...	...	...	...	...	...
		1,024	1,137	2,161	939	67	893	665	1,126	108

RETURN of particulars required by the Legislative Assembly from all Charitable Institutions in receipt of Government aid in the Province of Ontario, for the year ending 30th September, 1871.

		RECEIPTS FOR YEAR ENDING 30TH SEP., 1871.										EXPENDITURE FOR THE YEAR ENDING 30TH SEP., 1871.		
NAME OF INSTITUTION.	LOCATION.	Balance from 1870.		From Government.		From Municipalities.		From payments by inmates, or other earnings.		From private and general sources.		Total.		REMARKS.
		\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	
Protestant Orphans' Home and Female Aid Soc'y	Toronto	873	43	640	00	625	00	201	50	2807	13	5147	06	Expenditure not given.
Roman Catholic Orphan Asylum	Do	19	10	640	00	300	00	675	40	4796	30	6420	80	
Burnside Lying-in Hospital	Do	663	61	480	00	330	00	141	14	263	16	1897	91	
Magdalen Asylum	Do			480	00									Expenditure not given.
House of Providence	Do	11	50	320	00	200	00	392	30	3259	65	4183	45	
Girls' Home and Public Nursery	Do	325	75	320	00	350	00	596	50	1933	15	3535	40	
Boys' Home	Do	195	71	320	00	350	00	174	00	1925	88	2565	59	Expenditure not given.
Orphans' Home	Kingston			640	00									
Roman Catholic Orphan Asylum	Hamilton	539	00	640	00	200	00	289	85	3925	00	5393	85	
Orphan Asylum and Ladies Benevolent Society	Do	767	68	640	00	808	00	93	00	1421	55	3730	23	Expenditure not given.
Protestant Orphan Asylum	Ottawa.	476	24	480	00	50	00	330	00	2305	93	3945	17	
St. Joseph's Orphan Asylum	Do	4	50	480	00			336	45	1123	35	2244	30	
House of Industry	Toronto	1168	79	2000	00	4000	00	71	02	2955	92	11035	33	Expenditure not given.
House of Industry and Refuge for Indigent Sick	Kingston			2400	00	109	00			139	92	2858	92	
St. Patrick's Orphan Asylum	Ottawa.	230	30	480	00	25	00	161	75	985	91	1882	96	
		5285	61	11860	00	7367	00	3165	87	28362	45	54920	97	
												49072	31	5837 66 54920 97

SEPARATE INSPECTION REPORTS

UPON

Hospitals and Charitable Institutions.

GENERAL HOSPITAL, KINGSTON.

Statutory inspection was made of this Hospital on the 2nd of October, on which occasion there were 36 patients under treatment—24 men and 11 women. With the exception of two persons, who had been in residence over a year, all were recent admissions. I conversed with every patient in the Hospital, all of whom expressed themselves as being perfectly satisfied with their treatment, both medical and domestic.

The beds and bedding were clean, neat and comfortable, and every part of the House was a model of cleanliness and order, and reflected the greatest credit on the Steward.

The manner in which the affairs of this Hospital are conducted, and the regularity and order that prevail in every department, give indication not only of excellent administrative ability on the part of the Board of Governors, but of the interest taken by them in the work over which they have supervision.

The wards for the treatment of infectious diseases are in the basement of the building, and, although airy and well lighted, their use for that purpose is necessarily attended with danger and risk to the other patients. As there is plenty of room on the Hospital property, I would strongly recommend that a detached building be erected for the treatment of such cases.

The entire Revenue of the Hospital for the year ending 30th September, 1871, was \$6405 93, which was received from the following sources, viz. :

Province of Ontario	\$4800 00
Paying Patients	722 31
Subscriptions and Donations	339 36
Other Sources, including Medical Students' fees	544 26
	<hr/>
	6405 93

Although, of the 552 patients awarded admission during the year, 295 were received from the City of Kingston and 47 from the County of Frontenac, neither of these municipalities subscribed to the funds of the Hospital.

An examination of the detailed analysis of Hospital Expenditures attached to this Report will show that the financial affairs of the Hospital are closely and carefully watched, and administered in such a manner as to obtain the greatest amount of good from the limited means at the disposal of the Board of Governors.

604 patients occupied beds in the Hospital during the year; the average stay per patient was 29 $\frac{177}{166}$ days, and the collective stay of the entire admissions 17,583 days.

The places of residence, before admission, of the patients were :—

City of Kingston	295
County of Frontenac.....	47
United Counties of Leeds and Grenville.....	65
Lennox and Addington.....	48
Hastings	34
Other Counties and Cities in the Province.....	35
Province of Quebec.....	11
Other Provinces in the Dominion.....	6
United States.....	11
	<hr/>
	552

TORONTO GENERAL HOSPITAL.

Statutory inspection was made of this Hospital on two occasions during the year.

At my first visit—on the 8th of April—there were 76 patients under treatment, 54 males and 22 females. One of the males was a very bad case of small-pox. He had just arrived, as an emigrant, from Germany, having been sent up to the Hospital *in one of the city cabs*.

The presence of this patient, afflicted with a loathsome infectious disease, in the same building with other patients, although in a separate room, strongly suggested the necessity of outer wards in an isolated building for the treatment of infectious diseases.

The several wards of the Hospital, together with the beds and bedding, were, on this occasion, found in a very creditable state of cleanliness and order.

Three patients expressed a desire to see the physicians who had awarded them admission (who had not visited the Hospital for several days) and by the rules of the Establishment, under whose special care they were.

At my second visit to the Institution, on the 30th November, there were 81 patients in residence, 43 males and 38 females. There were then 6 typhoid fever patients in Hospital, and a considerable number had been under treatment during the two months preceding my visit. I saw and conversed with every patient in the House, all of whom expressed themselves as being satisfied with their medical and domestic treatment.

While nearly all the inmates appeared to be proper subjects for Hospital residence, and a large proportion were recent admissions, still there were a few who had been in the Hospital for long periods, and although afflicted with bodily ailments, it was evident that some of them were not proper subjects for a curative institution, and were occupying free beds, to the exclusion of acute cases.

I was present when dinner was served to the patients. The dietary was very liberal and of good quality,

The large associated wards and all of those on the second flat were in a very fair state of cleanliness and order, but the corridors and wards in the upper story (some of which were occupied by patients) were quite the reverse, and the walls and ceilings of the whole building were much in want of whitewashing. The state of the water-closets indicated an insufficient water supply and defective trapping, ventilation and sewerage, all of which, in a complete and effective state, are the most important sanitary requisites of an hospital.

I suggested to the House Surgeon the propriety of occupying the front wards of the hospital, some of which were entirely unoccupied and others only by a few patients. These rooms have good natural ventilation, plenty of light, and are otherwise cheerful, while some of those occupied in the rear are quite the opposite in these respects.

The wards are warmed by stoves, while the corridors are without any means of heating at all, in consequence of which the warmth is very uneven in the dormitories and quite insufficient in other parts of the building.

There appears to be great necessity for the introduction of steam heating arrangements into the hospital, where evenness of temperature is so important a matter.

The total number of patients under treatment during the year was 703—502 males and 201 females, who were received from the following places:

City of Toronto.....	309
County of York.....	170
Other Counties in the Province.....	52
Foreigners, Emigrants, etc.....	172
	<hr/>
	703

The receipts of the hospital and the sources from which the revenue was received were as follow :

Province of Ontario.....	\$11,200 00
City of Toronto.....	1,718 91
Other Municipalities.....	169 60
Paying Patients.....	1,737 58
Students' Admission Fee.....	426 00
Income from Property.....	6,247 83
	<hr/>
	\$21,499 92

Little, if any, of the income from property is available for the purposes of hospital maintenance, and is all absorbed in the payment of interest upon, and redemption of, Hospital Debentures.

The expenditures of the hospital for the same period were as follows :

Food, Medicine and Medical Comforts.....	\$7,810 79
Salaries and Wages, Fuel and all other charges for ordinary maintenance.....	8,456 68
Interest on Outstanding Debentures.....	4,046 29
Debentures Redeemed.....	3,000 00
	<hr/>
	\$23 313 76

HAMILTON CITY HOSPITAL.

An official visit was paid to this hospital on the 6th September, on which day there were 60 patients in residence, of whom 39 were males and 21 females, one of the last named a child born in the house. The beds in the main building, both in the male and female wards, were nearly all occupied by patients of recent admission. One of the inmates of the detached wards had been three years in the house, and three others, over a year; with these exceptions the awarding of admission to the hospital appeared to have been made with a view to carrying out the curative design of the institution. Of the four cases of long residence above referred to, all had ailments, still they were not of a character requiring continued hospital treatment.

I have again a most favourable report to make of the general condition and management of this hospital.

The patients (with every one of whom I conversed) were all satisfied with their medical treatment, and the domestic comforts of the house.

The various wards of the Hospital, together with the domestic departments, were found in excellent order, and thoroughly neat and clean throughout,—the beds and bedding comfortable and sufficient, the dietaries liberal and well served, and the general management of the affairs of the Hospital very satisfactory. One of the wards was a little overcrowded, and did not afford sufficient cubic space for the number of beds made up in it.

The revenue of the Hospital, and the sources from which it came during the year, were as follow :—

From the Province.....	\$4,800 00
“ the City of Hamilton.....	1,903 80
“ other municipalities.....	198 67
“ paying patients.....	217 58
	<hr/>
	\$7,120 05

The utmost economy, consistent with efficient administration, is exhibited in the expenditures, which were as follows :—

For food and medicine	\$3,484 54
Salaries, wages, fuel, and all other expenses....	3,545 11
	<hr/>
	\$7,029 65

As 536 patients passed through the Hospital during the past year, with a collective stay of 21,908 days, it would thus appear that the daily cost for each patient's food and medicine was 16-12c. per day, and for all other Hospital expenses, 16-40c., making a little over 32 cents for the entire daily maintenance of each patient. The 536 patients were received from the following places:—

City of Hamilton.....	346
County of Wentworth.....	47
Other Counties of the Province.....	65
Emigrants, foreigners, etc.	78
	<hr/>
	536

LONDON CITY HOSPITAL.

Another change of premises has been made by this Hospital, making four removals since 1857.

On the 18th April, the military Hospital, within the barracks, was again taken possession of by the local authorities, and the old building outside of the enclosure abandoned. Although the buildings now occupied are a great improvement upon the old premises, still it is very desirable that a building should be erected, possessing all the modern requirements of an Hospital in respect to structural, sanitary, and domestic arrangement. As there is now a fund in the hands of Trustees available for that purpose, it is to be hoped that the erection of such a building will not be long delayed. I inspected the House on the 16th August, on which occasion there were 15 patients under treatment,—6 men and 9 women. Two of the male patients had been in the Hospital over 3 years, and two of the females about two years. Three of the number were not proper subjects for an Hospital; all the rest were acute cases and recent admissions.

The wards and other portions of the building were inspected, together with the beds and bedding, and the whole found in a very creditable condition of order and cleanliness. The dormitories were well ventilated and comfortable, with plenty of space. The patients, with one exception, expressed themselves as being satisfied with their treatment.

The amounts received during the year for the support of the Hospital, and the sources from which the revenue came, were as follow:—

Province of Ontario	\$2,400 00
City of London	778 62
Other Municipalities.....	45 00
	<hr/>
	3,223 62

The expenditures for the same period were:

For food, medicine and medical comforts	\$1,219 41
Salaries and wages, fuel and all other expenses	2,004 11
	<hr/>
	\$3,223 52

215 patients were treated during the year, whose collective stay in the Hospital was 4,680 days. The daily cost of food is thus shewn to be 26-04c. for each patient, and for all other expenses 42-81c., or a total daily cost for each patient of 68-85c. The patients were received from the following places:

City of London	130
County of Middlesex	17
Other Counties of the Province.....	58
Emigrants	10
	<hr/>
	215

In addition to Hospital accommodation having been awarded to the above number, 780 out-door patients received medicines. One case of Asiatic cholera is among the list of diseases for which patients were admitted to the Hospital.

COUNTY OF CARLETON GENERAL PROTESTANT HOSPITAL, OTTAWA.

Statutory inspection was made of this Hospital on the 26th September. The several wards as well as every other department of the Hospital were found in a neat, clean and well-ordered condition. The beds throughout the Institution were comfortable, and the bedding well kept and sufficient. The rooms in the garret, which at my visit were occupied by two typhoid fever patients, lacked the means of proper ventilation, and were rather close and confined. All the other wards were airy and comfortable. A small-pox patient occupied one of the detached wards, which are large and airy. There were 17 patients in the Hospital on the day of my visit—14 men and 3 women. One patient had been in residence for three years, one for two years, and one for one year; all the rest were recent admissions. No complaint was received from any of the patients in respect to their treatment.

The Institution lacks many of the essentials of a well-ordered Hospital. The water-closet and bathing arrangements are very deficient.

I was informed that it is the intention of the Board of Governors to add a wing to the present building, in which provision will be made to overcome the present deficiencies of the Hospital. A few single rooms for private paying patients are much wanted.

The sum of \$2,775.51 was received from the following sources for the support of the Hospital:—

Province of Ontario.....	\$1,200 00
Municipalities..	100 00
Paying patients.....	362 45
Hospital property	225 00
Subscriptions, donations, etc.....	439 00
Other sources	449 06
	<hr/>
	\$2,775 51

The expenditure amounted to \$2,811.86, of which sum \$1,704.76 was for food and medicine, \$1,107.10 for salaries, fuel, light, etc. The daily cost of maintaining each patient was 45-82c., viz., for food 27-79c., and other expenses 18-03c.

The Steward still furnishes the dietary for the patients, for which he receives a fixed sum.

121 patients were admitted to the Hospital during the year ending 30th September; the places from which they came were not given in the returns received from this Hospital.

ROMAN CATHOLIC HOSPITAL, OTTAWA.

Since my last inspection of this Hospital the frame building, then used for the charity has been given up, and a large and commodious stone structure expressly built for Hospital purposes is now used. The internal arrangement of the building, and the sanitary appliances and domestic conveniences, are of the most complete character. In addition to two large associated wards, there are a number of single rooms for private patients, with sufficient cubic space in the entire building for 60 beds.

I inspected the Hospital on the 26th September, on which occasion every part of the Hospital was in the highest state of cleanliness and order. There were 11 patients under treatment—4 men and 7 women.

\$2,659.12 were received from various sources during the year for the support of the Hospital, viz.:—

Province of Ontario	\$1,200 00
Paying patients	1,207 25
Subscriptions and donations.....	132 44
Other sources	119 43
	<hr/>
	\$2,659 12

250 patients passed through the Hospital for the same period, representing a collective stay of 8,028 days.

HOTEL-DIEU HOSPITAL, KINGSTON.

Inspected this hospital on the 2nd October, on which occasion there were 10 patients in residence—6 men and 4 women. The wards were admirably clean and neatly kept, and the beds and bedding comfortable and sufficient.

200 patients were admitted during the year—109 males and 91 females; of this number
 65 were received from the City of Kingston,
 72 from the County of Frontenac,
 31 from other Counties in the Province,
 32 Emigrants and Foreigners.

The entire revenue of the hospital for the same period was \$2,092 19, received from the following sources, viz:—

Province of Ontario.....	\$800 00
Paying Patients.....	220 91
Subscriptions, donations, &c.....	832 86
All other sources.....	238 42
	<hr/>
	\$2,092 19

The expenditures for ordinary maintenance were as follows :

For Food and Medicine	\$1,109 99
Fuel, Water and all other expenses	579 71
	<hr/>
	\$1,689 70

GENERAL AND MARINE HOSPITAL, ST. CATHARINES.

Inspection was made of this hospital on the 7th September, there being on that day 9 patients under treatment—7 men and 2 women. I conversed with the patients, all of whom expressed themselves as being satisfied with their treatment.

The large associated ward for males is roomy and well ventilated, with sufficient cubic space for a greater number of beds than were then made up in it, but the rooms for female patients are rather too confined.

Every department of the hospital and the beds and bedding were found in excellent order, and the comfort of the patients well looked after.

Considerable difficulty is experienced in obtaining the services of good nurses. At my visit in September the matron had to do all the work, as none could be engaged. 121 patients were awarded admission to the hospital for the year ending 30th September, received from the following places:

Town of St. Catharines.....	49
County of Lincoln	16
Other Counties in the Province.....	36
Emigrants, Foreigners, etc.....	20
	<hr/>
	121

The entire receipts of the hospital for the same period amounted to \$3,057 25, received from the following sources .

Province of Ontario.....	\$1,000 00
Dominion Government.....	500 00
Municipalities.....	400 00
Property.....	48 00
Subscriptions, donations, etc.....	503 75
Other sources.....	605 50
	<hr/>
	\$3,057 25

The ordinary expenditures of the hospital amounted to \$1,961 51, in addition to which \$651 20 were paid on the new hospital property.

EYE AND EAR INFIRMARY, TORONTO.

This Infirmary was inspected on the 28th August, on which occasion there were 8 patients residing in the house under treatment, of whom two were residents of the City of Toronto, and six from other parts of the Province.

Of the above number five were paying patients in respect to board, while one was supported by a municipality, one by a Free Masons' Lodge, and one was on the free list.

In addition to the patients in residence on the day of my visit, 17 persons received free prescriptions and medical treatment for diseases of the eye and ear. The dormitories of the Infirmary were well kept, with good window ventilation. 12 beds were made up, although the cubic space of the room afforded room for 14.

The location of the house occupied for the purposes of the Infirmary, on Adelaide St., is very central, and the rooms on the first and second story are airy and comfortable, but the ground space is very limited.

I trust, however, that the Board of Managers will soon see their way to the acquirement of a more suitable house for the purposes of the Infirmary. More cheerful surroundings, combined with greater quietness and retirement, would be preferable for persons undergoing painful operations for diseases of the eye and ear.

The operations of the Infirmary for the year ending 30th September were as follow:—

In-door Patients.

Number in residence on the 30th September, 1870...	5
Admitted during the year.....	53
Total number under treatment.....	58

These patients came from the following places:—

Toronto	9
County of York.....	1
Other Counties in the Province	44
Other countries	4
	— 58

Of this number 33 paid for their board and lodging in the Infirmary while under treatment, 12 were supported by Municipalities, and 13 were free patients or supported by Benevolent Associations.

In addition to the resident patients, 198 external patients received prescriptions and medical treatment, of whom 171 came from the City of Toronto, 7 from the County of York, and 20 from other counties.

The receipts of the Infirmary, and the sources from which they came, were as follow:

Province of Ontario	\$750 00
City of Toronto	100 00
Private subscriptions and donations.....	253 22
	—
	\$1,103 22

HOUSE OF INDUSTRY, KINGSTON.

Inspection was made of this House on the 3rd October. Every part of the Establishment was inspected, and every part of it was found in a dilapidated, disorderly, and untidy state. The houses occupied, whether in respect to their location, construction, internal arrangement or general surroundings, are utterly unfitted for the purposes of the Charity, and the space upon which they are built is entirely too confined. With all these deficiencies, cleanliness and order cannot be expected, although more might be done in that direction by a liberal use of white-wash and the scrubbing brush, the basement of one of the buildings, which is occupied for kitchen, laundry and dining-room purposes, is in a very bad condition, with the floors rotting away, and from the bad smell which pervaded it, the drainage must be very

defective. The dormitories are very low in the ceiling, and in the winter time when window ventilation cannot be used, which is the only mode of airing, the rooms must be exceedingly close and disagreeable, as some of them were on the day of my visit.

The bedding was very scant, and by no means neat or tidy.

There were 30 inmates on the register, although I only saw 27, of whom 14 were men, 9 women, and 4 children. With the exception of the 4 children and their mother (the family of a rifleman then in gaol), the inmates of the House were all received from Kingston, except two who were received from its immediate vicinity. Two of the women were of unsound mind, although more idiotic than insane; and another was deformed and helpless; one of the men also was an idiot, and one quite blind. The rations given to the inmates are supplied by contract, and cost $7\frac{1}{2}$ cents per day for the ordinary ration, in addition to which vegetables are sometimes supplied from the garden in the rear of the House; besides which, an extra ration is supplied every week. No complaints were received from the inmates in respect to the dietaries. I was informed by the manager that the Corporation of the City of Kingston had secured new premises for the purposes of the Charity, for which there is great necessity.

The operations of the House, and the movements of the inmates for the year ending 30th September were as follow:—

Number remaining in residence on the 30th Sep., 1870...	22
Admitted during the year.....	230
	<hr/> 252
Of whom there were discharged.....	222
Remaining in the House on the 30th September, 1871	30
	<hr/> 252

These inmates were received from the following places:—

City of Kingston	100
County of Frontenac	20
Other Counties of the Province.....	76
Emigrants, foreigners, &c.,.....	56
	<hr/> 252

The average stay of each inmate in the House was $53\frac{1}{2}$ days, and the collective stay of the total number was equal to 13,432 days.

No relief is granted to out-door poor by this establishment.

The receipts of the House, and the sources from which they come, were as follow:—

Province of Ontario.....	\$2,400 00
Payments of inmates	109 00
Subscriptions and bequests	86 00
From other sources	73 92
	<hr/> \$2,668 92

The expenditures for the same period were as follows:—

Provisions, food, medicine and medical comforts....	\$1,143 63
Furniture and furnishings	157 32
Clothing for inmates.....	128 13
Fuel and light.....	414 19
Laundry and cleaning	70 20
Salaries and wages	450 00
Taxes, insurance and contingencies	66 01
Repairs—ordinary and extraordinary	86 90
Other expenditures.....	65 07
	<hr/> \$2,581 45

HOUSE OF INDUSTRY, TORONTO.

This establishment was inspected on the 24th August, when every part of the house and premises were found in the most admirable order and scrupulously clean and neat throughout.

The beds, of which there were 89 made up in the house, were very comfortable and the bedding in a clean and tidy condition and sufficient for the requirements of the House.

There were 70 persons on the register on the day of my visit, of that number I saw and conversed with 51; the remainder, although they slept and boarded in the house, were absent at the time. The 51 inmates comprised 23 men, 18 women and 10 children.

No complaints were received from any of the inmates.

The health of the House had been good during the year. At my visit I found three of the inmates in bed, whose only ailment was extreme old age.

There were 8 physical defectives among the number in residence, six of whom were blind and two had lost the use of their legs, one of the last named was quite idiotic, and the other an imbecile, neither of these persons appeared to be proper cases for this House—where their care is attended with great trouble.

The inmates were generally clean in their appearance and were comfortably clothed.

The general management of the affairs of this important public charity is all that could be desired, and the funds are expended so as to accomplish the greatest possible benefit, all of which is in a great measure due to the excellent system of administering its affairs and the efficient and thorough manner in which the Trustees, Managers and Visiting Committees perform their duties, as well as the excellent domestic management of the Superintendent, Mr. Duckett.

The operations of the House and the movements of the inmates for the year ending the 30th September are given in the following summary:—

Number of inmates remaining in the House on the 30th	
September, 1870	86
Admissions during the year.....	231
	<hr/>
	317
Of whom there were discharged.. ..	236
Died in the House	10
Remaining in the House on the 30th Sep., 1871.. ..	71
	<hr/>
	317

The places of residence of the 317 inmates were as follow:—

From the City of Toronto	159
County of York and other Counties of the Province	97
Emigrants and foreigners	61
	<hr/>
	317

The average stay of each inmate in the House was 112 days, and the collective stay of the total number for the year was equal to 35,564 days.

In addition to maintaining the 317 persons before named as residents of the House, relief in various forms was granted to 2,043 out-door poor, representing 408 families. Coal and bread were distributed to this class in the City, and in cases of extreme poverty, accompanied by sickness, rations of tea, sugar, oatmeal and rice were also given.

The residences of the out-door poor thus relieved were as follow:—

City of Toronto.....	1099
County of York and other Counties.....	245
Wandering poor, having no claim upon any municipality	195
Emigrants and foreigners.....	504
	<hr/>
	2043

The revenue of the establishment for the year, and the sources from which it was received, were as follow:—

From Province of Ontario.....	\$2900 00
City of Toronto.....	4000 00
Payment of Inmates.....	71 02
Income from property belonging to the House.....	577 90
Subscriptions, donations, and bequests of private individuals.....	2191 62
Other sources.	186 00
	<hr/>
	9,926 54

The expenditures for the same period were as follows, viz. :—

Provisions, food, medicine and medical comforts....	\$3,801 81
Furniture and furnishings.....	423 33
Clothing for inmates.....	260 88
Fuel and light.....	1,790 67
Laundry and cleaning.....	61 25
Salaries and wages.....	700 00
Taxes, insurances and contingencies	223 65
Repairs, ordinary and extraordinary.....	641 77
Other expenditures.....	816 57
	<hr/>
	8719 93

I herewith transmit the Annual Reports of the Medical Superintendents of Asylums for the Insane, together with those of the Warden of the Provincial Reformatory and the Principal of the Institution for the Deaf and Dumb, all of which contain interesting and valuable information in connection with the Establishments under their charge.

I have the honour to be
 Your Excellency's
 Most obedient servant,

J. W. LANGMUIR,
Inspector.

Office Inspector,
 Asylums, Prisons, &c. &c.,
 Toronto.

APPENDIX TO REPORT

OF

INSPECTOR OF ASYLUMS, PRISONS, &c.,

FOR THE TWELVE MONTHS ENDING 30TH SEPTEMBER, 1870.

REPORT OF THE MEDICAL SUPERINTENDENT OF THE ASYLUM
FOR INSANE, TORONTO.

J. W. LANGMUIR, Esq.,
Inspector of Asylums, &c., &c.

SIR,—I have the honour of addressing to you the following annual report of the Provincial Lunatic Asylum (now designated, by authority of Statute of Ontario, Cap. xviii., of the 34th of Victoria, "*The Asylum for Insane, Toronto*"), for the official year, ending 30th September, 1871, being the 31st from the first opening of the institution.

The operations of the Asylum for the twelve months ending as above, are represented by the following summary:—

	Men.	Women.	Total.
Remaining on 1st October, 1870.....	227	302	529
Admitted since.....	115	59	174
Total under treatment.....	342	361	703
Discharged.....	37	40	77
Eloped.....	1	0	1
Died.....	16	12	28
	54	52	106
Remaining 1st October, 1871.....	288	309	597

I have frequently pointed out the fallacy, in a practical or scientific relation, of comparison between the admissions and discharges of any one year. Considering the average period of residence of recovering patients, the erroneoussness of this system must be obvious. For the year ending 30th September, 1870, this average, after excluding nine long resident cases, was 9 months and 25 days; but including the nine, it was 16 months and 11 days. For the year now closed it has been 10 months and 25 days for the whole discharged; but excluding seven resident from $2\frac{1}{2}$ to $12\frac{1}{2}$ years, it has been 5 months and 28 days for the remainder, which is a much lower figure than perhaps ever before here. It is, however, to be observed that the fund drawn upon, of newly admitted patients, has been larger than usual, and that the discharges from these may truly be regarded as the cream of the whole; for hardly in

any former year has so large a proportion of incurables been sent in. It is very certain that but few of those remaining will give short periods of residence.

Of the 174 patients admitted in the last twelve months, only 43 have been discharged, thus nearly ratifying the principle of calculation urged by me in former reports.

The nationalities of the 174 admitted in the year, have been as follows:

Born in England.....	38
" " Ireland.....	35
" " Scotland.....	24
" " Canada.....	70
" " United States.....	4
" " other countries.....	3
	<hr/>
	174

For the first time in the history of this Asylum, England has over-topped Ireland in the supply of patients. Should any hunters-up of British injustice see, in this new fact, another proof of the oppression of their native land, they may, perhaps, be soothed by the probability, that of the 70 native Canadians admitted, a fair proportion have been of Irish parentage.

Of the total admitted since the first opening of the institution, in January, 1851, the nationalities have been as follow:

Born in England.....	644
" " Ireland.....	1,422
" " Scotland.....	586
" " Canada.....	912
" " United States.....	141
" " other countries.....	125
	<hr/>
Total.....	3,830

The religious distinctions of 174 admitted last year have been:

English Church.....	56
Presbyterian ".....	39
Methodists ".....	34
Roman Catholics.....	27
All others.....	18
	<hr/>
Total.....	174

The religious distinctions of the total (3,830) admitted since the first opening, are shown by the following figures:

English Church.....	1,177
Presbyterian ".....	874
Methodist ".....	554
R. Catholic ".....	896
All others.....	329
	<hr/>
Total.....	3,830

The civil state of the above 3,830 has been:

	Men.	Women.	Total.
Married (including widowed).....	905	1,189	2,094
Single.....	1,086	650	1,736
	<hr/>	<hr/>	<hr/>
	1,991	1,839	3,830

Disposals of the above 3,830:

	Men.	Women.	Total.
Discharged.....	1,078	958	2,036
Eloped.....	34	9	43
Died.....	414	386	800
Assigned to Malden, 1861	108	91	199
Assigned to Orillia, 1865, and transferred after.....	69	86	155
Remaining in the Toronto Asylum, 1st Oct., 1871.....	288	309	597
Total.....	1,991	1,839	3,830

The numbers sent in from various counties and cities in the past year have been as follow:

WESTERN.		EASTERN.	
Brant.....	1	Carleton.....	4
Bruce.....	1	Durham.....	7
Gray.....	3	Grenville.....	2
Haldimand.....	3	Hastings.....	4
Halton.....	3	Lanark.....	2
Huron.....	2	Lennox and Addington.....	2
Lambton.....	1	Leeds.....	2
Lincoln.....	4	Northumberland.....	6
Middlesex.....	2	Ontario.....	17
Oxford.....	2	Peterboro'.....	7
Peel.....	4	Prescott.....	1
Perth.....	5	Prince Edward.....	1
Simcoe.....	8	Russell.....	2
Waterloo.....	3	Victoria.....	1
Wellington.....	9	City of Ottawa.....	2
Wentworth.....	4	Rockwood Asylum.....	1
York.....	9	Province of Quebec.....	4
City of Toronto.....	37		
„ Hamilton.....	6		
County of Monck.....	1		
Michigan.....	1		
	109		65
Total.....		174	

The counties and cities from which the present 597 residents have been sent are as follow:

WESTERN.		EASTERN.	
Brant.....	10	Carleton.....	13
Bruce.....	3	Dundas.....	4
Elgin.....	5	Durham.....	19
Essex.....	2	Frontenac.....	3
Grey.....	12	Glengarry.....	9
Haldimand.....	7	Grenville.....	7
Halton.....	20	Hastings.....	8
Huron.....	19	Lanark.....	10
Kent.....	3	Lennox and Addington.....	4
Lambton.....	3	Leeds.....	11

EASTERN.		WESTERN.	
Lincoln	15	Northumberland.....	24
Middlesex	7	Ontario.....	28
Norfolk.....	3	Peterboro'.....	19
Oxford	4	Prescott.....	5
Peel	16	Prince Edward.....	3
Perth	18	Renfrew.....	2
Simcoe	16	Russell	1
Waterloo	10	Stormont.....	11
Wellington	25	Victoria.....	5
Welland	9	City of Kingston.....	9
Wentworth	20	„ Ottawa.....	9
York	29	Province of Quebec	3
Algoma.....	1	Rockwood Asylum.....	1
City of Toronto.....	102		
„ Hamilton	27		
„ London	2		
Michigan	1		
	389		208
Total.....			597

The counties and cities from which the whole number of 3,830 have been sent, are as follow :

WESTERN.		EASTERN.	
Algoma.....	2	Carleton.....	40
Brant.....	71	Dundas.....	11
Bruce	12	Durham.....	129
Elgin	46	Frontenac.....	49
Essex.....	28	Glengarry	24
Grey	45	Grenville.....	21
Haldimand	36	Hastings	64
Halton.....	103	Lanark and Renfrew.....	71
Huron	88	Lennox and Addington	23
Kent.....	36	Leeds	55
Lambton.....	43	Norfolk.....	127
Lincoln.....	126	Ontario.....	114
Middlesex.....	96	Peterboro'.....	76
Monck.....	1	Prescott.....	18
Norfolk.....	30	Prince Edward.....	36
Oxford	45	Russell	4
Peel	111	Stormont.....	59
Perth.....	70	Victoria.....	20
Simcoe	114	City of Kingston.....	97
Waterloo.....	58	„ Ottawa.....	40
Welland	56	Provincial Penitentiary.....	14
Wentworth	130	Rockwood Asylum.....	1
Wellington	153	Province of Quebec.....	5
York	325		
City of Toronto.....	685		
„ Hamilton	156		
„ London.....	25		
Michigan	1		
Unassignable, East and West.....	40		
	2,732		1,098
Total.....			3,830

The preceding table exhibits the excessive extent to which the City of Toronto has drawn on the benefits of the Asylum. Surely more than one bed in six, from the opening of the Asylum, has been over the fair share. There are now 102 insane persons, former residents of Toronto, in this house, and to this number must be added those belonging to Toronto now in the London and Rockwood Asylums.

To those who form their judgment of facts solely on figures, no further proof would be necessary to warrant the assertion, that Toronto is the maddest hole in all Canada if not in all the world. This year it has sent in more than one-fifth of all admitted, and yet you are aware of the fact that many whom I was unable to admit were sent from the Toronto Gaol to the Rockwood Asylum.

I find by examination of the 1st volume of the Admission Register, that in the first 12½ years of the existence of the Asylum the proportion of Toronto residents was even larger than latterly. Out of 1,382 admitted in that period, 288 appear to have belonged to Toronto. I am inclined to think that even this falls below the truth, for I have found, as may be observed in the table, 40 names registered without any assigned prior residence. Some names thus standing I personally know to be residents of Toronto. The conclusion is therefore warrantable, that some proportion of those now ranked as *unassignable* belonged to Toronto. It is doubtful whether the County of York's number (325) does not include some Torontonians, for throughout the first 7 or 8 years, the Register shows only the old *districts* of Upper Canada from which patients came and nothing more. As far as my actual or acquired knowledge of the prior residence of patients has enabled me to rectify this defect, I have done so; but though *York* was the leading County of the old *Home District*, and certainly did send in more patients than any other in the early years of the Asylum, I doubt not some injustice may have been done to it. In those old days, ink and time appear to have been scarce in the Asylum.

Perhaps similar injustice has, from the same cause, been done to other Counties: as Lincoln, Middlesex, Wentworth and Wellington, whilst contiguous Counties belonging to the same districts, appear with lower figures than the actual facts would verify.

Of the 597 patients now in this Asylum, 45 have been resident between 30 and 18½ years, 148 have been resident between 18½ and 9½ years, and the remaining 404 from 9½ years down to 10 days. The London Asylum has 73 patients of the first period, and 142 of the second, who were transferred from Toronto to Malden and Orillia.

WARRANT PATIENTS.

The following is a return of the insane persons sent to this Asylum from various County Gaols, under warrants of the Lieut.-Governor of Ontario:—

DATE OF ADMISSION.	REGISTER No.	Gaol FROM WHICH SENT.	PROSPECT OF CASE.
1869.		Counties of	
August	6.....3526.....	Wentworth	Incurable.
October	19.....3453.....	Bruce	do
October	22.....3544.....	York	do
December	30.....3562.....	Victoria	do
1870.			
January	20.....3568.....	Peel	do
March	1.....3582.....	Reeds	do
"	1.....3583.....	Hastings	Discharged 21st January, 1871.
"	15.....3588.....	York	Incurable.
May	17.....3609.....	Welland	do
July	7.....3623.....	York	Very doubtful.
September	2.....3641.....	Welland	Incurable.
"	24.....3650.....	Wentworth	do
"	26.....3653.....	Lambton	Discharged 25th May, 1871.
"	26.....3654.....	Lanark and Renfrew	do 21st March, 1871.
"	27.....3655.....	Norfolk	Incurable.
"	28.....3656.....	Grey	Doubtful.
October	11.....3660.....	York	Discharged 10th May, 1871.
"	15.....3666.....	Perth	do 10th January, 1871.
"	20.....3672.....	Wentworth	Incurable.
"	20.....3673.....	Hastings	do but dis. 26 July, '71.
"	27.....3681.....	York	Discharged 2nd April, 1871.
"	28.....3682.....	Peterboro'	Incurable.

DATE OF ADMISSION.		REGISTER No.	GAOL FROM WHICH SENT.	PROSPECT OF CASE.
1870.			Counties of	
November	4	3684	Oxford	Very doubtful.
"	4	3685	Durham and Northumberland	Incurable.
"	12	3688	Perth	Very doubtful.
"	14	3689	Hastings	Incurable.
"	15	3690	Lennox and Addington	Discharged 16th May, 1871.
"	22	3694	Waterloo	Incurable.
"	22	3695	Perth	do
December	2	3699	Grey	Discharged 17th March, 1871.
"	6	3700	Peterboro'	Incurable.
"	10	3706	Wentworth	Died 19th January, 1871.
"	10	3707	Wellington	Died 6th April, 1871.
"	10	3708	do	Very doubtful.
"	10	3709	Lennox and Addington	do
"	19	3714	Durham and Northumberland	May recover.
"	27	3716	York	Discharged 17th April, 1871.
"	27	3717	do	do 26th June, 1871.
"	28	3719	Ontario	Incurable.
1871.				
January	3	3721	Halton	Discharged 17th April, 1871.
"	14	3726	Peel	do 21st do
"	25	3729	Durham and Northumberland	Incurable.
February	18	3735	Wellington	do
"	22	3736	York	Doubtful.
March	3	3739	do	do
"	7	3743	Lincoln	Incurable.
"	8	3744	Wentworth	Discharged 1st October, 1871.
"	9	3745	Peterboro'	Incurable.
"	30	3751	do	do
"	30	3752	do	Very doubtful.
April	20	3762	York	Case doubtful.
"	24	3764	Wellington	May recover.
"	24	3765	York	Discharged 22nd June, 1871.
"	24	3766	do	Incurable.
"	26	3768	Carleton	Doubtful.
"	26	3769	do	Very doubtful.
"	27	3770	Leeds	do
May	4	3775	Carleton	Doubtful.
"	10	3777	Prescott and Russell	Very doubtful.
"	17	3778	Wellington	Incurable.
"	25	3781	Lincoln	May recover.
June	9	3784	York	Idiot.
"	19	3786	Lincoln	May recover.
"	23	3790	York	Very doubtful.
July	4	3795	do	do
"	26	3802	Hastings	do
"	26	3804	York	do
"	27	3806	Peterboro'	do
August	2	3809	Carleton	Doubtful.
"	4	3812	York	May be discharged, but jealous of wife.
"	7	3814	Simcoe	May recover.
September	1	3823	Lanark and Renfrew	No 3654 back.
"	6	3826	Ontario	Doubtful.
"	19	3829	Rockwood Asylum	Incurable.

Of the above, Nos. 3544, 3562, 3582, 3583, 3588, 3609, 3623, 3717, 3739, 3743, 3786 and 3829 were female lunatics. All the rest were males.

I fear that a comparison made between the column headed "Prospect of cases," and the promises of the Gaol Surgeons, may lead to the belief that many of the patients in the above list have much deteriorated since entering the Asylum. Some, indeed, are worse, and it required no gift of prophecy to predict their downward course. Others are better in bodily condition, but their mental powers have been long ago hopelessly dethroned. It seems to me not doubtful, that if the system of warrant committal of all sorts of insane people continues for any length of time, our present three Asylums will be filled with incurables, and not a bed will be available for acute and hopeful cases.

A fourth Asylum will be very soon be found requisite; and now that we have been informed by high authority, that "it has been proven that the maintenance of the insane can be done at one-half the cost of formerly" (vide *London Free Press* of 10th June, 1871), there can be no reason for procrastination.

The Province is overflowing rich, and very prosperous, and insanity is not on the wane. God forbid, however, that any of those philanthropists, who would cut down the Toronto Asylum allowance of beef, bread, butter, blankets, tea and sugar, fifty per cent., should themselves suffer under this reduction. No one would desire that even the most earnest tectotaler should fall into dementia, or the grave, from lack of either food or stimulants. I am sure that an abundance of the former is the best curative of insanity; and I have seen more good done by the latter in this Institution than they ever have accomplished in contested elections.

Our daily ration of beef (bones included) averages about $11\frac{1}{2}$ ounces. Some of our people, with softening brains, require very liberal diet. It would be hard times with these should a competitive Irish poor-house system of dietetics become the high road to popularity.

We have now, too, a decent number of paying patients, of various degrees of respectability, for whom it is not only advisable, but just and proper, to provide some variety of diet, and some extra comforts.

The following table will show that this Asylum is not altogether a pauper Institution. A steady increase in the number of respectable paying patients has, of late years, taken place.

DATE OF ADMISSION.		REGISTER No.	RATE CHARGED.	REMARKS.
1850.....	April 26	920	\$3 per week.	
1851.....	July 17	1070	3 "	
1853.....	May 17	1352	1 "	Warrant case.
".....	Oct. 24	1448	2 "	
1855.....	April 26	1647	125 per year.	
".....	May 8.....	1651	1 per week.	
1856.....	Dec. 8.....	1825	2 "	In arrears.
1857.....	July 2.....	1943	2 "	
".....	Nov. 5.....	2223	2 "	
1861.....	Jan. 15.....	2435	1 "	Reduced from \$2.
".....	May 21.....	2506	4 "	
1862.....	April 4.....	2671	1 "	Reduced from \$2.
1863.....	July 6.....	2895	2 "	Reduced from \$3.
".....	Aug. 7.....	2916	2 "	Chancery case.
1864.....	March 16.....	3008	5 "	
1865.....	May 18.....	3148	1 "	Reduced from \$2.
".....	".....	3149	2 "	
".....	July 27.....	3177	2 "	
".....	Aug. 20.....	3181	2 "	
1866.....	July 2.....	3242	2 "	
1867.....	July 23.....	3318	3 "	
".....	" 30.....	3320	2 "	
".....	Aug. 26.....	3325	2 "	
".....	Sept. 7.....	3328	3 "	In arrears
".....	Nov. 15.....	3365	2 "	
".....	Dec. 13.....	3379	2.75 "	Chancery case.
1868.....	March 12.....	3404	3 "	
".....	" 21.....	3407	2 "	
".....	April 20.....	3418	2 "	
".....	Aug. 4.....	3442	3 "	
".....	" 21.....	3447	2 "	Reduced from \$3.
".....	Oct. 31.....	3467	3 "	
1869.....	April 12.....	3491	2 "	
".....	May 18.....	3497	3 "	
".....	" 27.....	3501	2 "	Able to pay more.
".....	June 5.....	3508	2 "	
".....	" 16.....	3513	4 "	
".....	July 6.....	3516	4 "	
".....	Oct. 1.....	3537	4 "	Warrant and Chancery case.
".....	" 22.....	3544	3 "	
".....	Nov. 16.....	3549	2 "	Warrant case.—Large arrears.
".....	Dec. 13.....	3555	2 "	Total in arrears.
".....	" 15.....	3557	3 "	do do
".....	" 30.....	3562	2 "	
1870.....	Jan. 20.....	3568	3 "	Warrant case—in arrears.
".....	" 21.....	3569	1 "	Warrant case.
".....	" 27.....	3573	4 "	Reduced from \$2.
".....	July 12.....	3627	2 "	
".....	Sept. 2.....	3644	1 "	Nearly all in arrears.
".....	" 21.....	3649	4 "	Warrant case—all in arrears.
".....	" 26.....	3653	4 "	
".....	Oct. 17.....	3667	2 "	

DATE OF ADMISSION.		REGISTER No.	RATE CHARGED.	REMARKS.
1870.....	Oct. 20.....	3671	4 per week.....	
"	" 26.....	3679	4 "	
"	Nov. 14.....	3689	2 "	Warrant case.
"	" 25.....	3697	4 "	
"	Dec. 7.....	3703	2.75 "	
"	" 8.....	3705	4 "	
"	" 16.....	3711	4 "	
1871.....	Jan. 12.....	3724	5 "	From Province Quebec.
"	" 16.....	3728	4 "	
"	Feb. 14.....	3733	2 "	
"	March 7.....	3742	5 "	do do
"	" 14.....	3746	2 "	
"	" 28.....	3750	2 "	
"	" 30.....	3751		Warrant case.
"	April 1.....	3753	4 "	
"	" 5.....	3754	4 "	
"	" 24.....	3764		do do
"	May 2.....	3773	3 "	
"	" 3.....	3774	4 "	
"	" 9.....	3776	2 "	
"	" 19.....	3779	2 "	
"	" 26.....	3782	4 "	
"	June 23.....	3789	2 "	
"	" 28.....	3791	5 "	From Michigan.
"	" 30.....	3793	4 "	
"	July 4.....	3794	4 "	
"	" 7.....	3797	4 "	
"	" 10.....	3798	4 "	
"	" 10.....	3799	2 "	
"	" 13.....	3800	2 "	
"	" 20.....	3802	4 "	
"	" 20.....	3803	5 "	From Province Quebec.
"	" 20.....	3805	1 "	
"	" 27.....	3806		Warrant case.
"	" 29.....	3807	2 "	
"	Aug. 2.....	3809		do do
"	" 3.....	3810	2 "	
"	" 3.....	3811	3 "	
"	" 12.....	3815	2 "	
"	" 18.....	3817	2 "	
"	" 19.....	3818	2 "	
"	" 29.....	3822	4 "	
"	" 31.....	3823		do do
"	Sept. 18.....	3827	2 "	
"	" 21.....	3830	2 "	

The preceding list comprises 92 paying patients, exclusive of five warrant patients, the rate to be charged for whom I am unable to state; but I presume the omission is not important, for I doubt if much will be realized from this class. The others are, or should be, all good, viz. :—

4 at \$5 per week	\$1,040 00	per year.
24 at 4 "	4,992 00	"
13 at 3 "	2,028 00	"
2 at 2.75 "	286 00	"
40 at 2 "	4,160 00	"
8 at 1 "	416 00	"
1 at \$125 per year.....	125 00	

Total..... \$13,047 00

It is my belief that the paying list will undergo a gradual annual augmentation; and, under the operation of the new by-law framed by you and sanctioned by the Lieutenant-Governor, there is good reason to expect that much less will be lost by arrearage than formerly.

ADMISSIONS.

The admissions in the past twelve months have been more numerous than in any corres-

ponding period for the last ten years; but this fact is merely indicative of increased accommodation for patients, rather than of positive increase of insanity. Those, however, who imagine that demand for provision for the insane in this Province will subside with increase of provision for their lodgment, will find they have been much mistaken. Proximity to Asylums and railroad facilities, are the most potent multipliers of Asylum residents. A glance at the tables of counties, which have been given, must settle this question. York, Simcoe, Peel, Halton, Wellington, Lincoln, Ontario, Durham, and Northumberland, are surely striking illustrations of the fact; and now that a "net-work of narrow guages" is on the eve of construction, lunatics from the back country will come in far more numerous than before.

It is very improbable that if the City of Toronto had been obliged to pay as much for conveyance to the Asylum of each pauper lunatic as the City of Ottawa, or the County of Bruce, the total number sent in by it would now stand at 685. Were each municipality to pay for the Asylum maintenance of its own pauper insane, he must be a blind leader of the blind who does not see what constituencies would profit by the change.

Of the 174 patients admitted in the year, 17 were cases of general paresis in various stages of the disease,—some, indeed, almost in a moribund state. Five of the 17 are already dead, and when the remaining 12 may be called away is but a question of time. Two of the above five lived each only 4 and 7 days after admission. Had their friends been correctly informed of their critical condition, they would not have sent them to this house to die. Five epileptics were admitted; two of these have died. The other three must stand on our list of incurables, with too many like them, until the summons comes for their relief. When once epilepsy has culminated in insanity, though the force of the fits may be moderated by medicine, or even intervals of remission may be obtained, yet, as to radical cure, I fear that has not yet been realized. Among our discharges for the year, there were, indeed, two patients who had been affected with epilepsy, but only slightly insane. It is hardly doubtful that they will re-appear here, or at some other Asylum.

I hardly know how many *suicidal* patients have come in, for the statements in this relation, made by applicants, are sometimes rather over-coloured. We certainly have had a distressing number of the class who believe themselves to be unpardonable sinners; and it is well known in Asylums, that suicidal tendency is very common in them. As almost the whole of these creatures are really good people, who have been notable for their religious life and tenderness of conscience, I leave it to the common sense of the intelligent reader to assign the efficient cause of the delusion. I shall have occasion to allude to this subject under another head. Though it is a tender one to touch, professional duty commands that it be not evaded.

A few years ago not many patients came in who had not run the round of Bromide of Potash. That hobby appears now to have gone to rest, but we have a vaunted successor in the shape of Chloral Hydrate. If all that has been printed in praise of this drug, in the treatment of insanity, were true, we might expect that Lunatic Asylums would soon be untenanted. It has not yet, however, diminished the number of applications for admission into them, and we know that some cases, in which it had been pretty freely plied before entrance here, have been among our most troublesome and obstinate to deal with. We have found in these cases, as in others in which medication has been overdone, that the almost total negation of drugs has been the best treatment. The science of medicine, or at least of the *materia medica*, is not answerable for failure in the treatment of insanity. The malady can but seldom be brought to a fortunate termination at home; and every well informed physician knows that the efficient means for its cure are not at command unless in buildings constructed for the purpose.

APPLICATIONS FOR ADMISSION.

The number of applications made in the year was 279. In these are included the applications by County Sheriffs for admission of lunatics under warrant, and a number made in blank by yourself for similar cases. The Sheriffs almost all sent in subsequent applications, consequently these (13) may be deducted from the 279, thus leaving 266. In this number the applications were left uncompleted in 46 cases, no return having been made of the usual circulars of enquiry.

In 7 cases it was discovered that the patients were in Gaol, consequently outside my sphere of action; 7 others were found to be duplicate applications. I believe the number of these was larger; but so many applications come in without the names of the patients, and

indeed not a few without even the *sex* being mentioned (as country doctors are not sure of any Asylum separation being necessary), that it is not possible to state the precise number of duplicates. Four were referred to the London Asylum, as belonging to the district assigned to that Institution. Twenty-four advised vacancies were declined. A few of the applicants in this class politely acknowledged the awards, and expressed their thanks, explaining why the patients were not sent in, but the majority omitted any notification of their change of purpose; some of these cases turned up again. A mere remission of urgent symptoms, or the close of a paroxysm, is not unfrequently mistaken for recovery, and the offered bed is accordingly not accepted. This is more frequently the case with female patients than with males.

Five applications were on behalf of manifest, or subsequently ascertained, cases of idiots.

The following summary exhibits, with tolerable exactness, the course of applications for the year:—

Total applications registered.....	279
Deduct Inspector's cases	13
“ cases sent to Gaol.....	7
“ duplicates	7
“ referred to London.....	4
“ idiots.....	5
“ uncompleted	46
“ declined vacancies.....	24
	— 106
Remain.....	173

As the admissions of the year amounted to 174, the above remainder of 173 would seem to have been provided for; but 11 or more of the admissions were of persons on behalf of whom application had been made in the preceeding year.

The existing arrearage is now on the female side; but I believe it is not so large as my book exhibits it, for several females entered in it were sent to Gaol, and have been provided for by you at Rockwood and London.

On the whole, the insane of Ontario have in the past year been more amply and promptly provided for than at any other time in the last twenty years; and I am sure there is no State in the American Union, nor any country in Europe, in which they are proportionately more largely and comfortably cared for. But this satisfactory state of matters will not be of long duration, for the admitting capacity of our three Asylums will soon be exhausted; and judging from the quality of cases coming in, it will be vain to calculate on many vacancies from discharges. Beds will be available only when present occupants go to their last narrow beds.

DISCHARGES.

The discharges of the past year have been 78, which may be classified thus:—

Recovered	63
Improved	13
Unimproved	2
	— 78

The actual number has been, as here shown. 78 (37 men and 41 women); but as one woman, who was let out on trial at the end of the previous year and returned in the beginning of this year, was reckoned in the discharges of that year's report, I have, in order to keep the numerical sequence right, deducted one from this year's discharges.

Very great but unavoidable inconvenience and confusion results from the concessions occasionally made to the almost semi-insane friends of patients, who insist on taking them home for a season; some under the conviction or hope that they can do as well for them there and at less expense, but others who pay nothing at all remove them under various indefinable caprices. These people can not be expected to have much consideration for the niceties of statistical columns.

Of the patients discharged as "*recovered*," three have relapsed and returned, though at the date of leaving the Asylum, and for a considerable time before, they were quite sane and settled. One of them, however, was a general paretic; I admonished his friends of the improbability of continued sanity, and of the probable fatal issue of some future attack. He remained out nine months, and then returned, but to die in four days. Another was removed by his son, who believed the man was as well as he had ever known him. In a few months he attempted suicide, and was brought back under warrant. Insanity in his case is hereditary—a cousin is here among our incurables. The third relapse was that of a woman alluded to in former reports. She is now in for the eleventh time, and if her husband had more brains than she has, she would never make the dozen times. She has had fourteen children, and after the births of ten of them insanity occurred at various periods of lactation. As her term of procreative function must now be near the close, she will either be freed from her mental infirmity or sink into settled dementia.

Of the 13 discharged "*improved*," only one has been brought back. This patient was taken home merely for adjustment of certain legal affairs, and some "church inheritance" matters. The former were duly arranged, but the church problem is yet unsolved, and I have to bear all the blame.

Two had been resident respectively for $9\frac{1}{2}$ and $12\frac{1}{2}$ years. Both are doing well at home, though not restored to reason.

Of the remainder, I have not much reliable information with one notable exception.—that of a young man, who was taken home by my advice, after seven weeks' residence here. He was becoming daily worse, and I believe he would have sunk in a short time, if not removed; but he has regained both mental and bodily vigour with amazing rapidity at home. Cases of this sort are very instructive.

The two discharges called "*unimproved*," were unique specimens. One of them returned in a few days to thank me for my kindness. There was rather more method than madness in this case. Of the second, I know nothing, and I hope to remain in ignorance.

The average time of Asylum residence of the total discharged has been, as before stated, 10 months and 25 days; but excluding 7 resident for long periods, the residence of the remainder has been 5 months and 28 days each. The shortest period (18 days) was that of a man who not only appeared quite well on discharge, but had shown no insanity while in the Asylum, yet he hanged himself five days after leaving it. The next shortest was that of the general paretic, who, nine months after, returned, and died in four days.

DEATHS.

The deaths of the year have been 28,—16 of men and 12 of women, out of a total of 703 under treatment, or a little under 4 per cent. On the average residents (575), the rate has been over $5\frac{8}{10}$ per cent.

The fair mode of computing the mortality rate is certainly to reckon it on the whole number under treatment. It is well known, in Asylums receiving annually a large number of new cases, that the bulk of their mortality occurs in these, and not in the old chronic residents. To compare the mortality of such an Asylum as that at Utica, which received in 1869 463 new cases, and had a total of 1,033 under treatment, yet an average number resident under 600, with that at Toronto or London, would be alike absurd and unjust. The mortality at Utica, reckoned on the average number resident in 1869, would be over 10 per cent., but on the whole number under treatment, only about $6\frac{1}{2}$ per cent.; and I doubt not that of the old chronic cases alone would be far less. No one who knows anything of that excellent Asylum will believe that our *apparently* lower bill of mortality is the result either of more skilful or more humane treatment.

Of the 28 deaths occurring here in the past year, 10 were of patients admitted in the year, and four more were of patients admitted towards the end of the previous year. Thus 50 per cent. of the deaths of the year took place in new patients, whilst only an equal number occurred in all the residue of over 500.

The obituary table here presented will shew, on inspection of the column of "*Time Resident*," that the preceding remarks comport with facts.

Register No.	SEX.	DATE OF DEATH.	TIME RESIDENT.		AGE.	ORIGINAL FORM OF INSANITY.	PROXIMATE CAUSE OF DEATH.
			Yrs.	Mths. Days.			
3645	Male	9th October, 1870	0	1	42	Acute dementia	Chronic meningitis from intemperance.
294	Female	16th " "	6	10	57	Chronic mania	Phthisis—manifest.
3045	Male	22nd December " "	6	6	59	do	do latent.
3153	Male	30th " "	2	3	50	Mania	Hydrothorax.
3720	Male	14th January, 1871	0	0	48	do	General paresis.
3042	Male	" " "	6	7	70	do	General exhaustion.
3706	Male	19th " "	0	1	28	Epileptic mania	Epilepsy.
3646	Male	28th " "	0	4	58	Mania	General paresis.
3612	Female	15th February	0	8	48	do	General exhaustion.
2738	Female	23rd " "	8	6	46	Chronic mania	Phthisis—manifest.
3677	Male	9th March	0	4	30	Mania	General paresis.
3514	Female	10th " "	1	8	48	Dementia	Phthisis—latent.
2850	Female	20th " "	8	0	57	Melancholia	do
2984	Female	2nd April	7	2	16	Mania	Phthisis—manifest.
3698	Female	6th " "	0	4	45	do	General exhaustion of acute hereditary mania.
3707	Male	" " "	0	3	70	do	General paresis.
3663	Male	1st May	8	6	45	do	Cerebral effusion and paralysis.
2853	Female	16th " "	0	1	70	Dementia	Phthisis—manifest.
1659	Female	19th " "	15	11	61	Mania	do latent.
2921	Male	22nd " "	7	8	30	do	do
706	Female	24th " "	22	7	51	do	Bronchocele.
3107	Male	19th July	6	7	57	do	Chronic peritonitis.
3816	Male	24th August	0	0	34	do	General paresis.
3821	Male	28th " "	0	0	33	do	do
3772	Female	29th " "	0	3	65	do	Cerebral effusion.
2743	Female	1st September	9	0	65	do	Miasmus.
2677	Male	18th " "	7	5	26	do	Phthisis—latent.
3828	Male	22nd " "	0	0	48	do	General paresis.

Of the preceding 28 deaths, 7 resulted from general paresis, and 10 from pulmonary consumption, making together over 60 per cent. of the whole. The general paretics were, as usual, all men. Of the consumptives, 7 were women, and 3 were men.

I have in former reports made the observation that consumption, in female lunatics, has appeared to be the compensative death factor, against general paresis in men.

Four of the 10 cases of consumption were of the *manifest* form, and 6 of the *latent*. The three men who died of consumption had all been inveterately addicted to the secret evil habit. The form of the disease in all three was the *latent*. This is the almost invariable termination of the wretched existence of this class of lunatics. Their vitality has been brought down to so low a degree of feebleness, that disease seems to be unable to assume activity. They cough not, expectorate not, sweat not, have no blood-spitting, no colliquative diarrhœas, no pleuritic pains, and assuredly none of that mental brilliancy, insane hope, and indomitable restlessness so usually met with in ordinary consumptives. They wilt, and wither, and perish, even as the tender plant, gnawed and poisoned at the core by a hidden destroyer.

Such is the fate of hundreds and thousands; but the world knows not, or heeds not, the terrible fact; and hundreds and thousands are continuously crawling on in the hideous march of *Death*. Some, perhaps,—indeed but the few,—become insane; the rest die outside of Asylums, and the moral and corporeal canker escapes detection. If all men did their duty, this pestilence might be checked.

THE FARM.

Our farm operations have been prosecuted with the usual vigour and zeal which characterize the duties of our vigilant steward in every department of his service. Though we share in the common defect of some crops, resulting from long-continued drought, our products have been fair, as the following return of the steward will shew:—

Hay.....	80 tons.
Oat-straw.....	23 “
Mangold Wurtzel.....	81 “
Field carrots (failure).....	1 “
Potatoes (total).....	3,245 bushels.
Oats.....	550 “
Apples.....	250 barrels.
Green feed (off lawns).....	111 cart loads.
Clover seed—not yet ascertained.	

NEW FARM.

The new farm has undergone important changes since I had the pleasure of walking and wading over it with you in the spring of 1870. The northern part, then so inviting to snipes and plover, has been changed in aspect by tile and surface drainage. From a 12 acre field the heaviest portion of our potato crop has been taken. South of this, an 18 acre field has been three times fallow ploughed, under the conjunct hope of suppression of weeds and fertilization. This field has also been largely tile-drained, and cleared of a multitude of stones, some by interment, and others by carting off. A great extent of fencing has been done, at trivial cost beyond the expense of material. The eastern part of this farm will, when properly drained and well cultivated, be found unsurpassed in quality for those products which are the most valuable to an Asylum. Of course, that portion which has been appropriated to the new Central Prison will not be charged to the Asylum account.

LEASED LAND.

The term of lease of the Bacon Farm having nearly expired, and no buildings having yet been erected on the new farm, I have, with your sanction, leased for two years 7 acres of the Bacon farm, with houses thereon. Our entire household now numbers nearly 700 persons. We have within the walls housing for only 18 cows. When it is considered that a fourth of these, or in the winter a third or half, are not giving average milk, no one will think our tea and coffee are over-whitened. The land and cattle stalls outside enable us to house 10 head giving least milk.

KITCHEN GARDENS.

The products of the gardens have been fair and very useful to the inmates, as the following return will show:—

Green peas	8 bushels.
Spinach	20 "
Beets	20 "
Carrots and parsnips	250 "
Onions and early potatoes	70 "
Shalots	20 "
Tomatoes	50 "
French beans	40 "
Pole do	15 "
Cucumbers	25 "
Strawberries (failure)	$\frac{1}{2}$ "
Grapes (failure)	1 "
Red peppers	$\frac{1}{2}$ "
Raspberries	$\frac{1}{2}$ "
Currants	5 "
Gooseberries	3 "
Turnips	70 "
Citrons	100 heads.
Cabbages	4,000 "
Cauliflowers	1,200 "
Celery	3,000 "
Pumpkins	70 "
Squashes	50 "
Vegetable marrows	50 "
Melons	100 "
Indian corn	65 dozen.
Asparagus	4,500 bunches.
Rhubarb	1,200 "
Lettuce and radish	200 "
Parsley, mint, sage and savory	1,300 "
Small onions	400 "
Early potatoes (Queen's B. Day)	1 bushel.

FLOWER GARDENS.

Not so valuable in a materialistic view, though more so in their mind reluming and softening influences, are the products of the flower gardens and shrubberies. Those who practically know the amount of toil and vigilance required to keep even small grounds in a neat state, will readily understand that ours require a good deal of care and labour.

PROPOSED RAILWAY BRIDGE.

It is my apprehension that this work, owing to the lowness of the ground on each side, will be impracticable unless at a much greater cost than the estimate of last year. Elevated to the height required for safe passage under it of trains and locomotives, it would require very long embankments of approach. It is doubtful, too, if passage over it would at all times be safe; considering that the Northern, Grand Trunk and Narrow Gauge trains will be almost incessantly passing, spirited horses and cattle would be in some danger. The erection itself would, so near our grounds, be no object of beauty, unless more ornamentation were bestowed on it than the times warrant.

NEW FARM BUILDINGS.

Whether the bridge be proceeded with or not, the early erection of suitable farm houses

on the new farm is indispensable, for the great distance of drawing out manure and drawing in crops is of important consideration. A third or a half of the stock might be wintered on the land, and thus the manure made would be near at hand. A few years of Asylum cultivation and enrichment will demonstrate the loss sustained by the public in the last 20 years, from keeping this land back from Asylum possession.

NEW MAIN WATER PIPE.

If the supply of water to the new central prison falls on the Asylum pumps at the lake, a new main-pipe of $4\frac{1}{2}$ to 5 inches diameter, should be laid in due time. The present one is under 3 inch.

Some alterations and enlargements at the engine-house will also be necessary.

DEFECTS IN THE NEW WINGS.

In addition to various minor defects already brought under your visitatorial attention, and as far as possible remedied at little cost, I have now to point out a serious error of construction, which demands early action; for next summer may bring once more the pestilence of Asiatic cholera. You are aware that by means of a simple system of downward ventilation, attainable in primary construction at very little extra cost, but certainly not so afterwards, the water-closets of the main building are free from their former offensiveness. This system was followed in the construction of the water-closets of the two hospitals, and has been attended with the like success. I thought it would be adhered to all through, but unfortunately it was not; nor was it ever hinted to me that it would be deviated from. But innovation is not always reform.

LOW WAGES OF SERVANTS.

Believing that you understand the great difficulty of now procuring servants, at moderate wages, as compared with the rates paid here twenty years ago, I again appeal to you (as too often I did, in vain, to your predecessors) for a fair consideration of our pay-list. I cannot imagine that the most rigid public economist in this rich Province, would hold that less should be paid to servants in a lunatic asylum than to those in private houses. Certainly no one who has ever had the misfortune to have the care of a near friend or relative insane, and after exhaustion of patience, to seek admission for the case into an asylum, will say that the duty of taking care of a *score* of insane persons is a light one, or that it is either just, or truly economic to pay their attendants badly. The insane have kind and sorrowing relatives, who desire that those having immediate care of them, should have rather higher mental and moral gifts than ordinary house servants.

Though my own labours here have very much increased since I entered this house, I have never asked for any pecuniary favour for myself; but when I see valuable men with large, half-starving families, struggling to eke out their monthly pittances to meet all the requirements of the times, I cannot abstain from pleading in their behalf. A cord of wood now costs these men half a month's wages. Gracious Heaven! is this Christian political economy?

HEATING APPARATUS.

Some observations made in your last annual report, on the defects, and the heavy expense of the hot water system of heating this asylum, led me to ascertain, as far as I was able, the annual cost of steam heating, in similar institutions in this country; and as I regard the figures as very interesting, if not instructive, I now present them:

ASYLUMS.	NO. OF PATIENTS.	YEAR.	COST OF FUEL.	REPAIRS AND ALTERATION OF APPARATUS.	
Indianapolis.....	475	1870	\$ 9,477	\$5,989	
Trenton (New Jersey).....	567	1869	14,817	13,908	
McLean (Boston).....	176	1868	3,971	22,125	
West Virginia.....	324	1868	7,720	5,293	
Missouri.....	369	'67-'68	10,857	.....	4,460 tons.
Dayton (Ohio).....	400	1869	9,417	.....
Butler (Rhode Island).....	154	1869	3,075	5,839	
Northampton.....	405	1869	9,024	11,795	
Harrisburg.....	410	1869	6,034	.....	1,493 tons.
Utica.....	603	1869	15,802	24,197	
Longview (Ohio).....	537	1870	9,451	14,445	66,325 bushels.
Kalamazoo.....	300	1870	13,455	3,650	1,500 tons.
Toronto.....	570	1870	8,858	.....

All the above United States Asylums are more advantageously situate as to the cost of carriage, etc., than the Toronto Asylum. Those of Trenton, Dayton, Missouri and Longview are near large coal fields. Certainly, judging comparatively as to the number of patients lodged, the cubic space heated, and the relative climates, in the preceding figures no proof is shown that steam heating is cheaper than our hot water system.

The entire cubic space heated here is over 2,500,000 feet.

I would draw special attention to the column of cost of repairs, etc. I hardly ever take up an American report without finding this item standing in large figures; nor have I often visited any United States Asylum without finding important alterations and improvements in progress, or recently completed, all promising to bring the system up to perfection. Still, however, the figures continue big.

The annual repairs of our brick furnaces do not, I think, exceed \$200 a year, and good coil pipe lasts from 10 to 16 years. As to danger from explosion, we have nothing to fear; yet it is known that, even in Canada, life has been lost in an Asylum from explosion of a steam boiler. Our heat may not be so high as persons cooped up in stove-heated rooms in the city would deem comfortable; but one fact is certain, whilst colds, coughs and influenzas are epidemic outside this house, the insane people in it escape them.

I learned last July, from Dr. Dickson, of the Rockwood Asylum (which is heated by steam), that the quantity of coal about to be laid down for the year's consumption was 1,400 tons, and besides that a new additional boiler was needed to preserve the patients in some parts "from frost-bite." I did, however, learn that some other parts were so over-heated as to render closed windows unbearable, even in very cold weather. I believe the like fact has been realized elsewhere.

The irregularity and uncertainty of steam heat were pretty well exhibited last winter in the University and the Model School. The students of the former were, I was informed, for several cold days without heat; and the children in the latter had to be sent home to get warmed, because the temperature could not be raised above 40° of Fahrenheit. Our scholars can not be so disposed of.

The space heated, or to be heated, in the University, is about 750,000 cubic feet, and the quantity of coal burned is 280 tons, for 190 days of 9 hours each.

Osgoode Hall contains about 700,000 cubic feet, and burns 250 tons of coal for 200 days of 12 hours each.

The Asylum heating furnaces are kept burning night and day, for about 210 days. The bath boilers, the laundry boilers, and the engine boiler at the lake, are in operation all the year round.

Steam heating is not, I fear, either so cheap or so reliable as to be preferable to our present system; and it would require a very large outlay to introduce it, and considerable sums annually for repairs, renewal of boilers, and other incidental expenditures, to say nothing of tinkering perfectionisms. That we should succeed better than our neighbours across the lakes, is not very probable.

GENERAL HEALTH.

The general health of the inmates has been very satisfactory throughout the year, and especially during the summer. We have, of course, always on hand a certain number of

feeble people, who are withering away under some form or other of fatal organic disease. These we try to carry onward in life, even at considerable cost, as long as possible; though, regarded from the stand point of the dollar and cent, this is expensive management, still it is in conformity with the creed of the specialty of insanity.

INTERNAL AFFAIRS.

I have to report uniform harmony in the domestic working of the Institution. It is a good rule not to scold servants, but to discharge for the *first* offence, rather than to wait for a second *worse*. This rule here works well, and our people understand it. The staff is good, and I look to you for aid in keeping it so.

DIVINE SERVICES.

We still continue to be indebted to the clergy of various denominations, for their gratuitous ministrations, twice on each Lord's Day, throughout the year.

I do not know how much good these gentlemen might do, by occasional week-day visits, to members of their own flocks or denominations; these visits now are, in the poetic sense, angelic. Still insanity is a very diversified malady, each case must be carefully and tediously studied by itself, and all our words require to be very discreetly chosen. This constitutes the grand difficulty of preaching to a heterogeneous insane audience, a difficulty, as naturally to be expected, not always fully appreciated.

All asylums contain many suicidal patients, and not a few of this class are among the most regular attendants on religious services. The liability of these persons to misinterpret, or to twist to their own delusional views, the words of the preacher, is but too well known. not only is it necessary to avoid all subjects and expressions which point in the dangerous direction, but even when treating of others having no such affinity, we should remember that insanity is capable of the most wonderful incongruities, and absurd transformations. A blind man who insists that he is the Messiah because he misses (wants) his eyes, and that he is Napoleon Bonaparte, because he has lost a good part of a finger, or that he wrote Morrison's *Treatise on Double Entry* (Dr. & Cr.), because the first letters of his name are D. K.—surely may give any gloss to a Scripture text. Such men and women abound in all insane asylums.

At this moment there is in this house the most pitiable case of religious despair, I have ever yet seen. I sent for the poor woman's *clergy*. He did not succeed in comforting her, and if so, how should I? This patient was so far restored as to be allowed to go to church outside; but there she heard a sermon which took deep root. It was, however, the very worst she could have listened to. Words cannot depict the long agony of this poor creature. A kind old master has visited her, but I dare not repeat what he said of the preacher.

NEWSPAPERS, &C.

It is once more my pleasing duty, on behalf of many gratified readers, to thank the generous proprietors of the following journals, for the continued free supply of their respective publications:—

Toronto Leader, daily and weekly.
London Herald and Prototype, daily.
Ottawa Citizen, daily and weekly.
Chatham Planet, tri-weekly.
Christian Guardian, weekly.
Canadian Freeman, "
Guelph Herald, "
Guelph Mercury, "
Galt Reporter, "
Stratford Beacon, "
Berlin Telegraph, "

Ingersoll Chronicle, weekly.
Western London Advertiser, weekly.
Christian Advocate, "
Walkerion Telescope, "
Church Herald, "
Court Journal, "
Canadian Institute Journal.
Journal of Education.
Canada Presbyterian.
Monthly Record.

The *Toronto Globe* and the *Telegraph* are still among the absent, unless to subscribers. This must be an oversight.

Sincerely thankful for all the mercies of the past, and humbly trusting to the Divine Giver for their continuation in the future,

I am, most respectfully, &c.,

JOSEPH WORKMAN, M.D.,

Medical Superintendent.

REPORT
OF THE
MEDICAL SUPERINTENDENT
OF THE
LONDON LUNATIC ASYLUM.

To J. W. LANGMUIR, ESQ., *Inspector.*

SIR,—I beg leave to present you my Report of the London Asylum for Insane, and at the same time to thank you for the support and encouragement you have given me during a very troublesome and arduous year. Only by your support could difficulties and annoyances of almost daily occurrence have been overcome. I trust that they are now past, and that our course in future years will be pleasanter and easier than the first year of habitation admitted.

We have occupied this building since the end of last November, and no description of it has yet been given to the public. I will therefore commence my yearly report with a full description of the Asylum; and I will found that description on the suggestions of the English Commissioners in Lunacy, and those of the Association of Medical Officers of Asylums in the United States, as they are briefly embodied in the resolutions of Dr. Kirkbride, of Philadelphia. This method of proceeding will be found convenient, for the suggestions will be given separately, and in the notes there will be remarks where this Asylum is constructed in agreement with, or in difference from, those authorities. This plan will enable the reader to see at once how this Asylum would be regarded in England or the States, as approaching or departing from the recommendations of the ablest men of both countries, and it will settle the position in which it ought to be regarded by the people of this Province. If it fall short of what it ought to be, the management, not the liberality of the Government or Parliament, must be blamed.

I propose to call attention to the principles set forth by Dr. Kirkbride's resolutions on the construction of Asylums, which I append in this place for convenience of reference :—

“*Resolved*, That this Association re-affirm, in the most emphatic manner, its former declaration in regard to the construction and organization of hospitals for the insane; and it would take the present occasion to add, that at no time, since these declarations were originally made, has anything been said or done to change in any respect its frequently expressed and unequivocal convictions on the following points, derived as they have been from the patient, varied and long continued observations of most of its members :—

"First, That a very large majority of those suffering from mental disease can no where else be as well or as successfully cared for, for the cure of their maladies, or be made as comfortable, if not curable, with equal protection to the patients and the community, as in well arranged hospitals specially provided for the treatment of the insane.

"Second, That neither humanity, economy or expediency can make it desirable that the care of the recent and chronic insane should be in separate institutions.

"Third, That those institutions—especially if provided at the public cost—should always be of a plain but substantial character ; and while characterized by good taste, and furnished with everything essential to the health, comfort and successful treatment of the patient, should avoid all extravagant embellishment and every unnecessary expenditure.

"Fourth, That no expense that is required to provide just as many of these hospitals as may be necessary to give the most enlightened care to all their insane can properly be regarded as either unwise, inexpedient, or beyond the means of any one of the United States."

I will next allude to the suggestions of the English Commissioners in Lunacy which I also reprint, then we will see how the constitution of this Asylum agrees with the recommendations of the two most able authorities of their respective countries. I must add that this Asylum was built before either of the suggestions came to our knowledge, and that we are not therefore indebted to them, if we have acted in accordance with the principles they have laid down, and the fault is our own if we have not in more instances reached the perfection indicated in these resolutions and suggestions.

This Asylum was commenced in June, 1869, and was occupied in November, 1870, when far from complete in its internal or external arrangements. By April, 1871, its internal arrangements were completed as now seen. There still remains much to be done to complete the external ornamentation. What has been, and what will be done I shall describe presently.

The resolutions of Dr. Kirkbride are in strict accordance with the principles of construction of this building, I need not allude to them further than to affirm that the Asylum is of a plain, substantial character and furnished with everything essential to the health and comfort of the patients, as indicated in Number Three of Dr. Kirkbride's resolutions.

SITES.

In the English suggestion No. 1 :—"The site of an Asylum should be of a perfectly healthy character, and offer facilities for obtaining a complete system of subsoil drainage. A chalky, gravelly, or rocky subsoil is the most desirable. An elevated position is indispensable, admitting of direct application of the sewage by gravitation to the land.

"The site should not be near to any nuisances, such as steam engines, shafts of mines, noisy trades, or offensive manufactures ; neither should it be surrounded or overlooked, or intersected, by public roads or foot-paths. It should be elevated, as respects the surrounding country, and (if to be obtained) undulating in its surface, cheerful in its position, and having a fall to the south."

NOTE 1.—The first suggestion of the English Commissioners states that the site should be healthy, with every facility for subsoil drainage and of an elevated position. The site is 117 feet above the river, sloping to the east and to the west. Towards both points the rainwater flows, and, towards both, portions of the sewage are directed. The southern slope is, at the Lodge 1,200 feet distant, seven feet lower than at the building ; sewage, however, cannot be applied by gravitation to the land, as the inclination of the land is not sufficient for that purpose. There are no nuisances of any description near the site, nor is it offensively overlooked by roads or footpaths, so that the privacy essential to the comfort of the insane can be maintained.

"SUGGESTION No. 2.—The land belonging to the Asylum should, when practicable, be in proportion of not less than one acre to four patients, so as to afford ample means for agricultural employment, exercise and recreation ; and should be so situated as to offer facilities for any extension of the Asylum which may become necessary at a future period."

NOTE 2.—The land is in proportion of two patients to the acre of land devoted to farming purposes. There are 300 acres, and the buildings, when very full, will hold 550 patients.

“SUGGESTION 3.—The principal buildings should be placed near the northern boundary of the land ; and it is important “that the site should afford a plateau of sufficient extent for the main structure, readily accessible from the north ; the whole of the southern portion of the land being available for the undisturbed use of the patients.”

NOTE 3.—The principal buildings are placed one-third nearer the northern boundary. We diverge slightly from the third recommendation, because it is desirable in the warm summers of this latitude to have shade and shelter from the southern sun. We have planted a noble avenue to the South Lodge and in the crescent shaped roads round the buildings, which in a few years will be a favourite promenade for our patients.

“SUGGESTION 4.—The Asylum should be as central as possible to the mass of population in the county or district for which it is to be erected, and should be convenient with respect to its easy access by railway or other public conveyance, in order to facilitate the visits of friends and the supply of stores. It should be within a moderate distance of a town (not exceeding three miles, unless there is convenient railway communication) so as to afford facilities, if necessary, for the introduction of gas and water from the public works, and opportunities for amusement and relaxation to the officers, attendants, and patients.”

NOTE 4.—The Asylum is more than two miles from the business part of London, and has gas throughout. It is introduced from the city. And the amusement and relaxation of attendants form a prominent part of the management.

“SUGGESTION 5.—It is of the utmost importance that there should be a constant and ample supply of good water, of which a careful analysis should be made, as well to ascertain its fitness for the purposes of drinking and washing, as to determine the proper materials for pipes and cisterns. The quantity, exclusive of rain water, should, at the driest season, be not less than forty gallons per patient, per diem, and the amount should be accurately gauged. The actual position of the well should not be fixed until the position and general plan of the building on the site is determined upon.”

NOTE 5.—The supply of good water is in fair quantity, and of excellent quality; the analysis of the two wells is appended.

“Report of Analysis of two samples of water from the London Lunatic Asylum :—

“ LONDON, Ontario, February, 1871.

“ To the Hon. JOHN CARLING,

“ Commissioner of Agriculture and Public Works,

“ Toronto, Ontario.

“ SIR,—At your request I personally collected, on the 30th ult., for chemical analysis, samples of water from the two wells which supply the London Lunatic Asylum : and I now beg to submit the results of their examination.

“ The wells are designated ‘ East ’ and ‘ West ’ respectively.

ANALYSIS.

	East well.	West well.
“Total saline matter in one Imperial gallon		
“ (70,000 grains) of the waters.....	11.07 grains	18.81 grains
“The above saline matter consists of:—		
“Phosphates and Silica	Traces	
“ Carbonate of Lime	6.51 grains	14.90 grains
“ Carbonate of Magnesia	4.56 “	3.91 “
“ Alkaline Chlorides.....	Minute traces	Minute traces
“ Alkaline Sulphates.....	Very minute traces	
“ Total.....	11.07 grains	18.81 grains

"From the above it will be observed that the saline matters, in the waters, though they differ considerably in their proportions, are not materially different in nature. The only saline matters present in any appreciable quantity, are the Carbonates of Lime and Magnesia, which are, as usual, dissolved in excess of Carbonic Acid. The waters are remarkably free from Alkaline Chlorides and Sulphates: they contain no organic matter, either of vegetable or animal origin; a fact which conclusively indicates the absence of surface water, or any contamination from sewage; they are perfectly colourless and transparent, and contain nothing in any way prejudicial to health. The 'East' well being *softer* than the 'West,' is so much the more suitable for ordinary domestic purposes; but there is nothing in either water to prevent its general use in the Asylum.

"I have the honour to remain,

"Sir,

"Your most obedient servant,

"ALEX. T. MACHATTIE."

CONSTRUCTION AND ARRANGEMENT.

It will be convenient to describe this building by pointing out how it accords with, or differs from, the suggestions.

"SUGGESTION 1.—As an approximate rule, the provisions in a new Asylum for the different classes of patients may be in the following proportion:—

"Sick.....	15
"Recent and acute cases.....	20
"Working, quiet, and chronic cases.....	65
	<hr/>
	100

"In all large Asylums it is desirable that there should be a small reception ward in both divisions, in which patients, upon admission, should be placed for a certain period under special observation; and also that dormitories, with a few single rooms adjoining, should be set apart and arranged for the care and supervision, during the night, by special night attendants, of suicidal and epileptic patients."

"SUGGESTION 2.—The general form of an Asylum should be such as to afford an uninterrupted view of the surrounding country, and free access of sun and air; and so arranged as to give the principal rooms a southern or southeastern aspect."

"SUGGESTION 3.—Roads of approach or public entrances on the south side of the Asylum should, as far as possible, be avoided. The general entrance, the porter's room, the reception and visitors' rooms, the committee room, the clerk and steward's office, store rooms, and other offices, should be placed on the north side of the building."

"SUGGESTION 4.—As the building is intended for the accommodation of pauper patients, all superfluous external decoration should be avoided; at the same time it should be rendered as cheerful and attractive as due considerations of economy will permit."

"SUGGESTION 5.—The accommodation for the male and female patients should be kept distinct on either side of the centre; and the building should be so constructed as to admit of the separation of the male and female patients respectively into at least three classes. The numbers in each ward should be such as to require the services of not less than two attendants."

NOTE.—On each side of the building there are about 45 single rooms, of these twenty on each side are provided with shutters which slip into the wall and can be drawn and fastened by moveable screws to the centre mullion of the window. There are no padded rooms, and no other approach to restraint throughout the Asylum, than these shuttered rooms, fitted to contain a noisy or refractory violent patient during the paroxysm of excitement. The first corridor on the ground floor has twenty single rooms and two rooms for four patients in each. No dormitory in the Asylum contains

less than four patients, and no single room can have another bed in it. The first corridor is devoted to the feeble and ailing. It has a cheerful aspect to the front of the house, and is furnished with all the necessary comforts for sick people. The corridor is twelve feet wide, running east and west. It has a recess with a bay window twelve feet wide and twelve feet deep. There is a sitting room in each corridor, and an attendants' room. Every corridor has two attendants. Without superfluous decoration, pictures and good furniture make it look as cheerful as any residence.

The furniture will be described when we have commented on the suggestions.

"SUGGESTION 6.—The building may consist of three stories, provided the uppermost^t story be devoted to sleeping accommodation. As far as possible, all living rooms should be on the ground floor."

NOTE 6.—The building is, in the centre, four stories high. The front on the ground floor is devoted to offices and visitors' rooms, the north side of the ground floor to attendants' and officers' dining rooms, the lifts to the general dining rooms and small store rooms. The first extension east and west consists of three stories. The ground floor belongs to the sick, the first flat to the next most feeble, the third to the convalescent, and quiet, and strong, who are able to mount two pairs of stairs without fatigue. The second and third extensions of the building east and west are two stories high. The living and sleeping rooms are on each flat, and on each corridor, and are appropriated to the patients belonging to each flat, and under the care of their own attendants. I think this a better arrangement than having, as the Commissioners suggest, the living rooms on the ground floor and the sleeping rooms above; for each attendant has the care, night and day, of his or her own patients, and cannot throw the responsibility of any accident or error on the attendant to whom, by the other plan, they would be consigned during the day. The patients of each flat can have more easy access to the general dining rooms by this plan, and are not obliged to ascend so many steps to their own dining rooms three times daily.

"SUGGESTION 7.—Cottages or buildings of a cheap and simple character, consisting merely of associated day-rooms and dormitories, without long corridors or other expensive arrangements, should be provided for the use of working patients. These buildings should be placed in connexion with the wash-house and laundry, on the female side, and be conveniently situated in reference to the workshops and farm buildings on the male side. Provisions of an equally simple and inexpensive description should also be made for a portion of the idiotic and epileptic patients, and also for chronic cases."

NOTE.—Cottages of a simple character are to be built for chronic cases, and for idiotic and epileptic patients next year.

"SUGGESTION 8.—The chapel, dining hall, and all offices and parts of the building common to the establishment, such as the kitchen and scullery, the wash-house and laundry, the workshops and store rooms, should be sufficiently spacious to meet the prospective wants of the Asylum in case of an increase in the number of patients."

NOTE.—First, as to workshops; two large buildings are erected in the rear of each wing, for the workshops of the respective sides of the house, two stories high, and sufficiently large to enable us to employ all hands capable of working, or of being taught to work. The kitchen is in the rear of the centre building, and has a railway to the lifts. It is provided with one large cooking stove, with a steam range for roasting and boiling, consisting of twelve receptacles, and capable of roasting and boiling the meals of 700 people; there are also steam boiling copper tea-kettles of a capacity of 200 gallons, and five agricultural boilers of 100 gallons each. There are two rooms, one for pastry making and kitchen stores, and the other for keeping the cold meat, bread, and milk for immediate use; there is in another room, a large refrigerator of a capacity sufficient for the use of the Asylum.

"SUGGESTION 9.—The chapel should not be placed over the kitchen. It should be of easy access, and capable of comfortably accommodating at least three fourths of the patients. It should have the usual character and arrangements of a church, contain no

“special or peculiar provision for the separation of the sexes, and, if possible, be detached from the Asylum.”

“SUGGESTION 10.—A general dining hall for patients of both sexes, of ample size, conveniently situated with reference to the kitchen, and capable of being made available for the purposes of recreation, should be provided, and a scullery and other requisite offices should be attached to it.”

NOTE.—The laundry is immediately north of the kitchen under the same roof, provided with four revolving washing machines, centrifugal wringer, and a number of washing troughs, all provided with cold water; and a steam pipe to boil water is attached to each machine and trough; a mangle room upstairs with a steam roller mangle, and steam-heated plate for warming irons; also a drying room, and rooms for the washed clothes. Each dining room has closets for the articles used in it, and a sink for washing up, supplied with hot and cold water. Two spacious dining rooms, capable of each dining 220 people, with front and two side doors. Above these is the music room for dancing, and also used as a chapel, 80 feet by 40. It would hold all the inmates of the Asylum. Upwards of 200 attend Sunday service, and more the weekly amusements.

“SUGGESTION 11.—A good residence in, or immediately connected with the Asylum by a covered way, and in a central position, should be provided for the medical superintendent, with kitchen and other necessary domestic offices.

“Suitable apartments of moderate extent should be provided for the assistant medical officer, and also for the steward, the matron, and the chief attendants; but for these officers a separate kitchen is not required. Those for the assistant medical officer should be conveniently placed with regard to the wards occupied by the sick and recent cases. The rooms for the matron and chief attendants should be in or close to the wards, and those for the steward near the north entrance. There should also be sleeping accommodation for the domestic servants of the institution, with whom might conveniently be associated those patients who habitually work in the kitchen.”

NOTE.—An excellent residence is given to the Superintendent, connected with the west wing. Suitable apartments, bed and sitting rooms, and well furnished, are provided for the officers. And ample accommodation for servants, until there are more than 500 patients, when other sleeping rooms will have to be made in the very spacious attics.

“SUGGESTION 12.—The proportion of single rooms throughout the Asylum need not exceed one-fourth. The single rooms should be chiefly in the wards appropriated to the excited and the sick, but a few should be available for special cases in the other wards.”

NOTE.—The proportion of single rooms is about one-fourth, and they are specially appropriated to the excited and the sick.

“SUGGESTION 13.—In the upper stories, passages of communication of moderate width should be adopted when practicable, in lieu of wide corridors, and the dormitories should be placed to the south. Generally, long, wide, and expensive corridors should not be constructed, but only so much passage or corridor provided as may be absolutely necessary to connect the several parts of the building. It would, however, be of advantage to have on each side of the building one good corridor to the south, with a large bay window; and these corridors should not be less than 12 or 14 feet in width, the space on the upper floors being thus made available for dormitories. The dormitories should be so arranged as to admit of the beds being placed against the internal or cross walls.”

NOTE.—Corridors are 12 feet and 14 feet wide with recesses and bay windows. There is a deficiency of light in some of them which I hope to see remedied.

“SUGGESTION 14.—The stairs should be built of stone, without windows or long straight flights. The well should be built up, and hand rails should be provided.

“SUGGESTION 15.—The staircase should be so arranged that the medical officer, attendants, and others, may pass through from one part to another without unnecessarily retracing their steps.”

NOTE.—The stairs are of wood, and, in the end two-story buildings, not wide enough, but in the other parts of ample width, they have wall on each side, so that hand rails, beyond a projecting rail attached to the wall, are not needed as safeguards. There is a staircase to every corridor on the side in addition to the main entrance at the end of each corridor.

"SUGGESTION 16.—All the corridors, and day and sleeping rooms, should have "boarded floors; and it is desirable that the boards should be tongued. Oak floors, capable "of being cleaned by dry rubbing, are preferable for the corridors and day rooms, and "for single rooms occupied by dirty patients. Where oak is not used it is indispensable "that they should be of the best yellow deal, and thoroughly well seasoned. At each "end of a corridor, the continuity of the timber floor should be broken by a fire proof "construction, so as to prevent the spread of fire beyond the corridor in which it may "occur. The floors of the sculleries, lavatories, and water closets, need not be of wood. "No timber inserted in any wall should be placed within nine inches of any smoke flue, "and no plug should be driven within six inches of the inside of any flue. Wherever "practicable, horizontal and lateral fire proof construction should be adopted. The floors "next below the roof, in all parts of the Asylum occupied by patients, should be con- "structed throughout of incombustible materials. Hydrants connected with the cisterns "in the roof should be placed in convenient positions on all the floors, and also a "main externally, by which water could be thrown over the building. The walls of the "galleries and rooms generally should be plastered, unless lined with pressed bricks."

NOTE.—All the floors, except kitchen and laundry, are of wood, matched, or, as the English phrase is, tongued. The water closet floors are tile, set in water lime. There are cisterns in the roof, two on each side, and a large central one, with hydrants in the corridors of the central building, and hose coiled over each hydrant ready for use. Every wall is plastered with a hard coat on the face, capable of taking paint, when it is thought fit to put it on, which I trust will be soon.

"SUGGESTION 17.—No associated bedroom should be designed to contain less than "three beds."

NOTE.—No associated bedroom has less than four beds, others with five, six, seven, ten, and two with sixteen, for those quiet patients who are employed in daily out-door labour.

"SUGGESTION 18.—The general height of each story should be less than 12 feet.

"The associated dormitories for clean and healthy patients should not contain less "than 50 feet superficial to each bed or patient.

"The separate sleeping rooms generally should be of not less than 63 superficial feet. "Those appropriated to sick or bed-ridden patients should be of larger dimensions, with "extra means of ventilation, and should be provided with a fire-place. If detached "hospitals are erected for fever or contagious cases, the cubical space should not be less "than 1,500 feet per head."

NOTE.—The height of the ceilings is eleven feet from the floor in both rooms and corridors, not less than 800 cubic feet for each bed, many much more.

"SUGGESTION 19.—The day rooms, of which there should be at least one in each "ward, should not be less than 40 feet superficial for each patient, where there are no "corridors of the minimum width of 10 feet; where corridors of that or any greater width "exists, the day rooms may afford only 20 feet superficial for each patient, it being under- "stood that a space equal to 40 feet superficial be provided for each patient in day rooms "and corridors combined. Mere passages of communication are not to be considered as "corridors.

"SUGGESTION 20.—The day rooms should be so arranged as to afford ready com- "munication with the grounds, and it is essential that those appropriated to the aged "infirm, and excited patients should be on the ground floor.

"SUGGESTION 21.—Rooms should be provided for two or more attendants to each "ward, single attendant's rooms not being of less dimensions than 100 feet superficial; "and, whenever practicable, such rooms should be placed between two dormitories, with

"glazed doors of communication. Larger rooms should also be provided in some of the "male wards for the use of married men and their wives."

NOTE.—Every corridor has a good sized day room, and there is outside communication to each corridor. Each corridor has an attendant's room with sleeping accommodation for two attendants, and provided with suitable furniture.

"SUGGESTION 22.—The windows of the day rooms and corridors should be large, "having oak sashes, double hung, with wrought iron sash bars, not more than three feet "six inches from the ground, and made to open easily, and so as to allow a free circula- "tion of air, but not so far as to expose patients to danger.

"The wall below should not be sloped or splayed, but recessed, to admit, if requisite, "of a seat.

"In the dormitories and single rooms the windows should, as a general rule, not be "placed more than four feet from the floor.

"Strong solid shutters should be provided for a majority of the single sleeping rooms."

NOTE.—The windows throughout the Asylum are of cast iron and sash bars, open top and bottom six inches, the one sash balancing the other, with fourteen inch by six glass, two panes in each upper and lower sash, and sashes double with a strong wooden mullion between. All the windows are about three feet six from the floor, the bay windows and corridors have three lights in them.

The single rooms have shutters sliding into the wall in the rooms for the refractory patients. In the others, loose shutters that can be removed at pleasure.

"SUGGESTION 23.—The doors of the single rooms should open outwards, and be so "hung that when open they will fold back close to the wall."

NOTE.—The doors all open outwards, but do not go back to the walls as they ought.

"SUGGESTION 24.—In each ward there should be conveniences for washing the "person, a slop-room containing a sink, a store-room, or closet, water closets in the pro- "portion of one for ten patients, and a bath.

"It is very desirable that all water closets, lavatories, &c., should be placed in pro- "jections, and where practicable, a lobby not less than five feet wide, with cross ventilation "should separate the wards from the water closets. In some instances the bath room "may be so arranged as to be available for two wards.

"For the majority of the inmates, however, a general bath room conveniently placed "will be found greatly to facilitate the bathing of the patients; and it is of great im- "portance that the taps, as well as the supply and water pipes, should be of large size, so "as to admit of the ready change of water for each patient, and further that the supply "and waste should be distinct."

NOTE.—In each ward there is a bath room with a dressing room attached. Two baths wherever there are more than twenty patients in a ward, two water closets to each ward, from three to six wash-basins with water pipe to each basin in every corridor. Besides, there are 150 wash-stands throughout the Asylum, shutting up to conceal the contents and containing earthenware basin, jug, and chamber. Two urinals on each corridor on the male side, a store closet on each flat for the daily changes of clothes and linen; a chamber under every bed (except in the refractory wards) in the Asylum.

"SUGGESTION 25.—Suitable infirmaries, in the proportion of at least one-seventh of "the whole, should be provided, in which the cubical contents of the sleeping rooms "should be one-third more than in other parts of the building; and every room, including "the single rooms, should have an open fire-place.

"A day room in each infirmary is necessary, and also a small kitchen with a cooking "stove.

"A mortuary, consisting of two rooms, should be provided for each division, in a "position easily accessible from the infirmaries."

NOTE.—As already stated the sick occupy the first corridor on the ground floor. A mortuary is placed outside the buildings.

"SUGGESTION 26.—All the day rooms and galleries should be warmed by means of

"open fire places, or open fire-stoves : and in large rooms two fires should be provided. Fire-places should also be built in all the associated dormitories. In large rooms, such as the chapel or general dining hall, and in the corridors, further provision for warming may be necessary, by means of some approved and recognized principle of artificial warming."

NOTE.—All the rooms and galleries are heated by steam. The coils are under the windows of the corridors and sitting rooms, and run along the basement of the bedrooms. Ample warmth up to 75° Fahrenheit can be had throughout the Asylum, even when the thermometer is 10° below zero.

"SUGGESTION 27.—The ventilation generally should be provided for by means of flues, taken from the various rooms and corridors into horizontal channels communicating with a perpendicular shaft, in which means of rarefaction should be placed for the purpose of extracting the foul air. The rarefying chamber for ventilation, when fire heat is used, must be entirely fire proof. Particular attention should be paid to the night ventilation of the dormitories, which would be promoted if gas burners were placed under properly protected ventilators in the ceiling."

NOTE.—The ventilation is tolerably good. Air holes can be opened or shut in the corridors. Closing ventilators are in every room, conveying the air into the hollow walls, and thence to the chimnies of the furnaces. There is a down draught, where it will act from every water-closet, preventing smell, but not completely.

"SUGGESTION 28.—In all cases, descending or horizontal smoke flues should, when practicable, be avoided ; but when used, they should be entirely constructed of brick-work, rendered or pargetted, inside and out, and flues from any of the heating or other furnaces, which are carried up through any of the main walls, should be constructed with a hollow space around them, to prevent the inconvenient transmission of heat into the building during the warmer periods of the year."

NOTE.—There are no smoke flues, except for the open fire-places in the officers' rooms.

"SUGGESTION 30.—The best and most approved system of pipe or tubular drainage should be adopted, with an adequate fall, so as effectually to distribute the sewage by gravitation in a fresh state over the land. Means of flushing should be provided, and the drains and sewers properly ventilated."

"SUGGESTION 31.—The enclosed airing courts need not be more than two in number on each side. They should be of ample extent, so as to afford proper means for healthful exercise, and should have a southern aspect. They should all be planted with trees and shrubs, and any trees already within them should be preserved for shade. Where walls are required they should be sunk in a ha-ha. Earth closets may be used in the airing courts with means for removing the pans from the outside."

NOTE.—The sewage goes to a creek half a mile from the house, the solid matter being intercepted half way. It has to be pumped if it is to be used on the farm. By the present arrangement the more valuable constituents in solution escape altogether. There is an airing court at the extremity of each wing, with half the walls sunk in a ha-ha. They will be sodded and laid out to the best advantage. Two sides of them are covered with a roof, projecting six feet, for the benefit of shade, and to enable patients to have open air exercise in wet weather. On the male side there will be a skittle alley.

"SUGGESTION 32.—The whole of the rain-water from the building should be collected in tanks, suitably placed, for the purposes of the wash-house. The materials used for pipes and cisterns should depend upon the quality of the water as ascertained by analysis."

NOTE.—The rain-water is collected in tanks, but unfortunately very few of the tanks connect with the engine pump.

"SUGGESTION 34.—Farm buildings, with stables, &c., for visitors' horses, should be provided ; and there should be suitable workshops for tailors, shoemakers, carpenters, blacksmiths, painters, &c."

NOTE.—The farm buildings are of good brick, and consist of two barns 60 by 30, a stable stalled for eight horses and room for four more, with a room for harness, grain bins, room for sleighs and carriages, and one for seeds, hay loft over centre, cow house for 25 milking cows, pigsty for 40 pigs, hen house, large shed for wood and another for coal. In addition there is a storehouse 70 by 30, two stories high and a basement, a dairy 25 by 30. Water pipes conduct to dairy, stables and cow house. There is a bakery (far too small), and a meat shop where the carcasses supplied are kept and cut up for use, and a refrigerator large enough to hold a carcass of a beef and two or three carcasses of mutton. The yards at the back of the building are provided with privies. They are gravelled near the building and grassed on the outer half.

There is a garden of twelve acres for vegetables, and it has already 1200 fruit trees (dwarf apple and pear), peach, apricot, plum, quince, cherry, nuts and vines, more than 1200 currant bushes, 400 gooseberry bushes, 1000 raspberry bushes, and many of the large cultivated blackberry so much esteemed on this continent. A gardener's house (with green-house and forcing-house) is built close to the kitchen garden, large enough to supply the asylum with ornamental plants.

Commencing from the south lodge, there is an avenue of 1200 feet straight, 120 feet broad, planted with elms, pines, horse chesnuts, tulip and sweet chesnut trees, in five rows on each side, and each side corresponding, bounded by a galvanized wire fence on red cedar posts varnished. At the north end, next the building, there is a large oval grassy mound, nearly 300 feet long by 200 wide, with a handsome fountain in the centre. The gravel road leads to the front door by a circle, the sides planted with the double flowering red and white horse chesnut.

The avenue is continued by the semi-circle round the building to the back, past the superintendent's house on the west, and the kitchen garden on the east. On the east, it consists of a row of horse chesnuts and elms on each side, with the addition of pines on the south of the road. On the west, horse chesnuts and lime trees or lindens, with pines also on the south. The space between the road and the building is laid out in grass, flower beds and flowering shrubs, and ornamental trees.

To the west of the road, opposite to the superintendent's house, there is a plot of six acres, levelled for a bowling green and croquet grounds, and planted with ornamental shrubs.

Evergreens, thorns and shrubs are and will be placed wherever they will add to the natural beauty of the grounds.

From the west lodge, each side of the road is planted with walnut, butternut, ash and other trees.

The farm on which the buildings stand has an area of 200 acres. Buildings and ornamental grounds occupy fully fifty acres, leaving the remainder for farm uses.

Trees are or will be planted where they will show well as single trees, or in clumps.

There will be no fence but wire between the buildings and the public road. A road divides the farm on which the buildings are situated from the other farm of 100 acres, which is cultivated solely as a farm, except an orchard of about 400 trees of good apples in full bearing.

There is a house on the 100 acre farm, and about 30 acres in natural bush.

The Grand Trunk Railway runs past the south-east corner of the land.

The whole property is accessible to all the patients, many of whom wander where they like over it. The whole is surrounded by an eight feet picket fence.

The furniture is most abundant and excellent. I do not describe the officers' quarters, they are furnished as such apartments should be, nor is it necessary to describe the offices. They have good efficient desks, carpets and other appurtenances.

The corridors are provided with oak benches, backed and railed, fifteen inches broad in the seats, of which there are 109 in the Asylum. There are 50 benches stuffed and covered with tapestry, 30 hair sofas, 30 arm chairs stuffed, covered with hair.

The upper flat for convalescents is carpeted. 1500 chairs of different kinds are in the building, one beside every bed in the Asylum, 100 rocking chairs, a table or two in every sitting room, and in each recess. 500 pictures, German oil chromos, many of them are of high quality.

There are three melodeons, one piano, billiard table, bagatelle table, parlour croquet table, 200 stereoscopic views with stereoscopes, a library of 500 volumes, newspapers and magazines—daily and monthly, chess, draught and backgammon boards wherever wanted.

There are many other trifles, such as musical boxes, canary birds, &c.

Every bedstead in the Asylum is of maple or cherry, polished and varnished, morticed together without screw or nail, all crevices filled by the closely fitting joints well glued, the slats on the bottom are also morticed and glued in when the parts of the bedstead were put together. Each bedstead is supplied with a palliass of straight rye straw, and a hair mattress three inches thick of best horse hair, covered with a ticking of good strong quality, with linen sheets and best Canadian blankets, with imitation Marseilles quilts of strong quality. The wet patients only have straw, and as the number of them diminishes, the straw is replaced by the hair mattresses. There are now about 40 straw beds diminishing monthly.

I will now say something about the general management, the rules and mode of applying them. I will state the method, because it is said that the system is on its trial, and I suppose I am on my trial with it, and that it will depend on its efficiency and success whether I shall be allowed to continue it or not. It is pleaded that if it is not economical it must be abandoned. Here at the outset, I protest that economy is not and ought not to be the only test of efficiency. There is another measure of success, and that is the welfare of the patients, their comfort and happiness, the proper provision made for them in food and clothing; and by no means should the comfort and contentment of the servants and attendants be governed by the sole rule of economy.

There are three attendants on each side of the house, called chief attendants, paid better salaries than the others. They are selected to have charge of each flat, to overlook the other attendants, and to be responsible for everything used on their flats. They have to keep books which show every article received from the matron, how they are expended, when returned, if worn or sent back to store, to receive and give out all clothing, bedding, wine, or other comforts, to keep lists of furniture, and to see that the attendants under them dress and keep clean all the patients on their flats, and are at their work at proper times. Their responsibility is not nominal, for all missing articles are replaced at their cost, if they cannot account for them. They have separate accommodation, and are as much as possible kept aloof from other attendants, and provided with their own means of amusement and recreation. Hitherto this plan has worked well, but I by no means claim any novelty for it, for I suppose something similar in principle is done in almost every Asylum. If there is anything new it is in the strict discipline with which the rules are kept up, and thorough accountability exacted.

The Steward receives everything from the stores, enters them in his store-book, and when he issues to the Matron, to whom only things for the house are given, he enters them in his issue book. She also enters their receipt and her issues to the chief attendants, who also keep a book of account of them. No goods, not even a ball of twine, can be obtained by credit, or purchase, in town, except by a requisition sent by the Steward to the Superintendent, and an order for the article signed by him. The Superintendent copies the weekly requisitions into his book in quantities required for the week, so that he can compare at any moment any excess of consumption, with the previous, or any other week, and see at once when extravagance begins, or when there is not a sufficient issue of any thing for the wants of the house. Bread, meat, flour and groceries, large and small, as well as clothing and bedding, wine, and every other article, thus come under the weekly inspection of the Superintendent, and can be completely checked, or controlled, before waste becomes excessive. Thus all that can be done is accomplished to prevent waste in the issues. There is no mode of preventing waste in the use and consumption, except by a constant supervision of the waste tub as it leaves the dining rooms, or goes to the pigs; this also the Superintendent does, so that he can readily see when food is improperly thrown away, and this is, though it looks trifling, one of the efficient means of preventing extravagant expenditure, for more loss results to a large institution from what is wastefully thrown away than from all extravagant issues put together. When half loaves of bread go to the pigs, and butter tubs half cleaned out, and meat sent away unconsumed, and vegetables thrown away; where such waste goes on, there is expenditure

on the largest scale. For economy in these things, it will be at once seen how essential it is to have only one kitchen in an Asylum, for nothing is more certain than that waste is multiplied by the number of cooking places, and by the number of cooks. Each dining room has an attendant (counted on the preceding list as kitchen maids) appointed to the care of the room, whose duty it is to see to the waste food, and not to allow anything fit for use to be put into the tub. She has also charge of all the knives, forks and other articles in use in her room, and has to keep the room in a cleanly state.

The Matron has charge of all articles brought into the house, and general control over all.

The Superintendent gives full authority to all the heads of departments ; he never interferes unless his attention is called by the head of such department, or complaints are brought to him by subordinates.

Thus each chief having full authority is imbued with a sense of responsibility, and has a pride in carrying out as he thinks best the objects of the Superintendent, subject to the general rules laid down and printed and given to every one in the establishment, as guiding principles, not to fetter any excellent manner of carrying out those principles, which any chief may think fit to adopt. I consider that the employed are well, but by no means extravagantly, paid ; that they bear in numbers no undue proportion to the wants of an institution for 500 patients ; that the mutual satisfaction that prevails between them and the Superintendent is a testimony to the well-working of the system. That the by no means large expenditure is also a testimony to its efficiency ; that the appearance and general health of the patients, the total absence of all kinds of restraint, also bear testimony to the beneficial effects of the system on the patients for whose benefits the whole is done. The fact that there are never two per cent. in bed, and that none are forced to keep out of bed, or to work, or to go out, but that they go to work willingly by persuasion only, and wander about in large proportion to their total numbers, over the grounds, also confirms the success of the system. More than 100 men out of 250 have been at work this spring doing something. The most violent have never been restrained or had more done to them than seclusion for a few hours at a time, and yet we take in all comers, so that we get our fair proportion of hard cases like other Asylums. We employ strong dresses for a few patients who tear their clothes, or strip themselves naked, but these dresses differ only from ordinary dresses in being made of strong material, and in being fastened behind by a screw button, leaving all the limbs and body as free in their movements as any other dress does. They are certainly not handsome dresses, but that cannot be helped. The women work in the kitchen, laundry and the sewing room. They spin all the wool and cotton, and make all the socks and stockings used in the house. All the clothing, linen and repairing is done by the patients with the help of one seamstress and attendant, when the latter can be spared. It is intended to add to these occupations in every possible way as soon as the buildings are completed, and there is time to consolidate our work outside, and time to instruct in new modes of work. We are so new in this Asylum ; our patients have been collected from everywhere in the Province, and all not thoroughly known to us at present ; that we are not able to discover all at once their fitness for particular occupations. Handicrafts are to be encouraged when opportunity occurs.

Our farm consists, as stated, of 300 acres, less the land covered by yards, buildings and gardens. This land was in a very poor and foul state when it came into our hands. During the summer we confined ourselves to cleaning, ploughing and subsoiling the 200 acres, on which the Asylum stands, and we took a few root crops from the other 100, clearing the land thoroughly. This year we have put in 35 acres of oats and seeded them with clover and grass. We have 25 acres of potatoes, 30 acres of carrots, mangolds, and turnips, smaller quantities of Kohl rabbi, cabbage, corn, peas, tares and other minor things. We have soddied about 4 acres. We have sown with lawn seeds about 12 acres ; we have planted 3000 forest and fruit trees, most of which are doing well. More than 10,000 loads of gravel have been spread on walks, roads and yards. More than 15,000 loads of earth have been removed and conveyed to localities where filling and levelling were needed. Nearly two miles of internal fences, wire and wood, have been erected, and much other work has been done. Much more requires to be done before the grounds will have that neat and orderly appearance such an institution ought to exhibit.

We have 20 cows for milk, to be increased to 25 this year, if possible, 8 working horses, 73 pigs, &c., &c. ; other stock must be purchased, as farm produce is grown. We shall soon require a considerable addition to our grant for this purpose, for there can be no worse farm management than in having an understocked farm or quantities of under cultivated land. We intend to plant two acres with the French Osier, and occupy our patients in the winter months in basket making. There are many German immigrants to whom this business is familiar, who can be had to train our attendants to the work. We have a few acres suitable for cranberry cultivation, which we intend to commence next year.

The 30 acres behind the stables and barns where a few forest trees remain, have to be freed from stumps, levelled and seeded with grass, and will have seats and ornamental walks made wherever they will be an accommodation.

I think I have given a full, plain description of the Asylum, its grounds and farm, and of all that has been done, and of most we intend to do. We are thoroughly anxious to excel the best institution on the continent, if we are able, and we well know the difficulty of the task that is before us, for there are few if any countries in the world, where Asylums are constructed with such liberality, supported with such disregard of expense, if efficiency can be obtained, and presided over by men so intelligent as in the United States ; that it will be no easy matter to approach the general condition of such asylums ; still, if we can surpass them, we mean to do it, and we give them fair and friendly warning, to look to their laurels, as we are bent on running our race so as to reach the goal before them, and transfer their chaplets to our brows, if energy and perseverance can do it.

The first report of a new Asylum requires comments on so many subjects, that it is impossible to avoid a certain amount of confusion and absence of order and arrangement, nor is it possible to be lengthy with so many subjects to touch upon. I shall make a few remarks on the tables of admission, the provision for future admissions, a few comments on defects, on our wants, on treatment, on general subjects, on the garden, on the farm, and a few other matters.

Admissions of both sexes have amounted to 135, discharges to 26, deaths to 15—or on an average population of 432—3 $\frac{1}{4}$ per cent. nearly. When the number of aged inmates, long residents of Asylums, is taken into consideration, this is a most moderate percentage of deaths. It shows that the Asylum has a healthy site—is in a healthy condition internally, and it puts to silence all rumours to the contrary, that have been more or less prevalent during the past year.

The tables that each Asylum should prepare for reports were left to the discretion of each Superintendent by the Association. We have given those tables which our limited time of occupation of this Asylum has enabled us to form, with such gleanings from the books of the two Asylums whose inmates came here in November last, as have any approach to accuracy.

Very many of the inmates of this Asylum are hopeless incurables. Even those admitted since its opening have been collected from gaols where they have been committed for safe keeping, or from townships where they have been known as imbeciles or chronic melancholics for years. These new admissions have only helped to swell the number of incurables, and very few of them present any hope of cure. Unless the incurables are collected in cottages, as many ought to be, this Asylum will have very little room for the treatment of those who are curable, for many years to come ; and the Province will be hindered from applying the only efficient and economical method of decreasing the number of insane—that is, by providing facilities for prompt admission and treatment in the earliest periods of the malady. Delay is fatal to cure, and fatal to economy ; for every month of delay in the application of treatment, shuts out a chance of cure, and saddles the Province with the maintenance of all incurables for the term of natural life. There are only 26 discharges on 135 admissions into the Asylum this year, because the admissions have been for the most part chronic incurables, detained at home or elsewhere until cure has become hopeless. How many of these might have been cured in the early stage, it is now impossible to say ; but it is certain that some would, and their cost of maintenance saved. If men are not open to the influence of arguments derived from the

curability of the disease in its early stages as they affect patients, there are many who are open to the influence of arguments addressed to the economy of affording the means of early admission to treatment, and who will see that to fill an Asylum with chronic incurables is the most expensive system the State can adopt; far more so than the erection of buildings to house the chronic, and by so doing to provide means of treating the curable.

This Province has done a great amount of charitable work under the guidance of the Government, since the establishment of the Dominion; but it has not yet done sufficient, for it has years of inaction to recover, and while the necessity for more accommodation remains, its labours cannot be considered over.

The present state of the house, and its prospects of being speedily overcrowded, will excuse me pressing once more on your consideration the question of how to dispose of increasing applications for admission. In this Asylum we cannot accommodate more than twenty additional females, and about sixty more males. The forty-five the central portion of the Idiot Asylum will accommodate, can be found and placed there in one month from its opening. What then is to be done with future applicants?

The subject of cottage systems was discussed at the meeting of Asylum Physicians at Toronto, but it was discussed from a wrong basis. The essay of Dr. Jarvis recommended that all patients on first application to a physician should be placed in cottages without any special reference to the nature of their insanity. This plan met with, I think, just condemnation. The plan I should like to see in operation here is very different, for it recommends that patients who have long been under the supervision of the physician, and who are found to be quiet, harmless, and trustworthy, should be transferred to cottages, built on such a plan as will afford economical management and arrangement. Fit occupants can be found in this Asylum in large numbers—the house could be relieved at once of 100 patients, who would be happier, more at home, enjoying domestic life as it cannot be had in the crowded rooms of an Asylum, being able under proper supervision to exchange visits with the inhabitants of other cottages, even of different sexes. They would value the privileges a cottage system of this nature would give them, so highly that there could be no stronger inducement put before them to encourage self-control and good conduct. They would regard being sent back to the greater restrictions and more regular discipline of the Asylum as a calamity to be avoided by every effort in their power to make. But I have before, and in detail, presented this subject to your notice, and set forth its advantages both to the patients and to the economical provision for increasing applicants; and I have shown how easily Asylums can be relieved of the harmless and working inmates. I need do no more in this place than express my opinion of the urgent need of making provision for such patients.

I must call your attention also to the subject of cottages for servants, which I have often brought to your notice, pointing out the inconvenience and loss this Asylum sustains by the want of houses for the married men, near the institution; and also the means of remedying the evil by building cottages on land easily to be had close to the farm, and which would pay a rental of about eight per cent. on the outlay. I have the honour to assure you that unless some efficient remedy is applied during the ensuing year, all the best servants will be lost to the Asylum.

I have spoken on the description of the Asylum in terms of praise of the general plan and construction of the building, but there are many points of detail that ought to be commented upon.

The tiles in the water closets on the male side were made of very soft, ill-burnt material, and they were laid in sandy mortar rather than in cement. I have had them all relaid in proper material, and I have been compelled to do two of them with brick, as I had to use the sound tiles to fill up the other closets where the tile was worthless. They are now tight and in good order.

The plaster beneath the corridors has been falling ever since our occupation of the building. I believe the chief cause is joists of too light a construction, for when excited patients dance or jump on them, down comes the plaster; and also too small a quantity of hair in the mortar, as I am assured by the plasterer who repairs the damage; perhaps, also, much is due to occupation of the building too soon after plastering. Much cost has been incurred in replacing plaster, and will continue to be incurred.

The quality of the paint used in the building could not have been worse, for it rubs off nearly like whitewash.

The windows have been an incessant cost and trouble, for they are always out of order, and will not shut when open, nor open when shut, and the rackets on which the chains revolve are always out of order. I am not saying too much when I state that one carpenter has been occupied fully four months in going over the building, keeping the windows in working order.

The shutters in the refractory wards were never strong enough. They can be bent and torn by comparatively feeble women, and the screw fastenings are of the worst and softest iron, and have long been useless. The shutters have been closed by screws through them into the mullions for a long time.

I suppose there never was an Asylum built where some such details of construction have not had to be complained of immediately after occupation, and therefore we have no more to complain of than other newly built Asylums, and indeed far less, for my visitors from the States' Asylums tell me that they have far larger complaints to make of their institutions, and far grosser faults to remedy. I am therefore not pointing these evils out in a spirit of fault finding, but to indicate things that have to be amended; for I am ready to bear the strongest testimony to the excellence of design, as well as of construction, with few and comparatively trifling exceptions; but it always happens that small defects such as these are those that give the administrators the greatest amount of trouble and inconvenience. Thus, to us the want of shutters, that cannot be secured, or windows that cannot be shut up at night, without a carpenter, are troubles greater than much larger errors would be in general construction.

The desire to save expense in construction, however laudable, is not always, by any means, true economy, and we need not go beyond this institution for instances of this truth. I am afraid that many of our water pipes will have to be replaced by larger, as our population increases and our wants are more accurately discerned.

I have now to consider a few matters of arrangement for future convenience.

The mortuary has never been of any use. It is only a small room, capable of holding a corpse while awaiting burial. It has no conveniences for making post-mortems—it is not provided with water, nor with sinks or drains, nor with a fire-place, so that any corpse will in winter be frozen hard before a post-mortem can be made. It is good for nothing for its assumed purpose. A mortuary should have two rooms, one for the body, with water, hot and cold, waste drains and a good light, the other room for the convenience of those whose duty it is to make examinations which cannot be carried on in an Asylum, which has no surgery, no room for examination of patients, except bedrooms or crowded wards. A surgery and an adjoining consultation room are much wanted, as well as a suitable mortuary. The present bakery which is too small for its purposes would make a good mortuary; a new bakery will be necessary when the wants of the Idiot Asylum are to be supplied from it, and it would be best to build an efficient bakery, and take the present one for a mortuary. The present mortuary will be needed for an oil and paint room, safe from fire, and is about good enough for such a purpose.

Provision against fire in the out-buildings is most urgently needed; there are no hydrants outside the main building; there are no pipes from any tank or other source of water supply more than one inch and half diameter—a size totally inadequate to give a supply of water in case of fire—at least two thousand feet of hose half two inch, half three inch, 3 Ply, ought to be provided, with hydrants in proper localities, and pipes large enough to supply them. Nothing could, under present appliances save this building in case of fire, the engines could not pump into the tanks fast enough, nor could the water get out of the tanks to the hose. All the wells are too deep for the suction pipes of any fire engine to reach them, and the few rain water tanks, even if a fire should find them full, would be emptied in an hour, there is therefore nothing wanting more earnest consideration than provision against fire.

The downward ventilation of the water closets does not act efficiently. I shall be glad to see some remedy applied. The cause of this defect I am unable to point out. I have caused the engineer to examine into it, but he finds no defect in the pipes, nor can

he conjecture why the ventilation is imperfect. It is a most important matter, requiring thorough investigation.

I am glad to be able to state that the boilers and flues are perfect, now the smoke stacks have been put into the chimnies, and the furnaces well and thoroughly lined with fire brick. The draught is excellent, and the consumption of fuel must be lessened. We shall be able to ascertain the amount consumed weekly when the cold weather sets in.

The mortar used for the airing yard walls is so bad that, with a piece of stick, the patients can take out any brick or any of the stones in the foundation. The wall will have to be pointed with cement next year in an efficient manner.

TREATMENT.

The treatment of insane in Asylums is a question still unsettled. In this Asylum, containing so large a number of hopeless incurables, treatment is with them confined to taking care of their comforts, providing them with good and nourishing food in sufficient abundance, clothing them well, and working those who have strength to work, according to their power, exercising out of doors all who are able to walk, male and female, giving them as much amusement and occupation indoors as they can enjoy. For this purpose we have daily dances in the afternoon for an hour or two, music, stereoscopic views, &c., and they spin, knit, and make all the socks and stockings used in the Asylum, make all the clothing, except the men's, and repair every thing in need of repair. We have never had any tailors or shoemakers fit to work sent to this Asylum, and therefore the work peculiar to those classes has to be done by paid labour.

Employment is the rule of treatment, and the best. We have few sick, and our deaths this year have been very few. Medical treatment has been confined to keeping up the strength by the use of stimulants, tonics, and the phosphates. I requested the assistant physician, Dr. Lett, to whom I am much indebted for his constant attention and very able assistance, to give me a report of the action of medicines employed in the treatment of the patients, during the past few months, although the number of cases is not sufficient to enable us to draw positive conclusions. We can confirm, as far as our experience extends, the conclusions of Dr. Clouston, of the Carlisle Asylum. Opium, I have for years totally abandoned, as injurious, in nearly every form. I cannot myself hold so high an opinion as Dr. Lett does of the value of Hydrate of Chloral, for I think in long continued doses it lowers the action of the heart and nerves, and if not of the stomach directly, indirectly; and one observation of Dr. Lett's confirms this view, for he expresses an opinion that it lowers the temperature of the body. If it has this effect, I consider it injurious, for if there is one thing more important than another in the treatment of insanity, it is, that it is absolutely essential to maintain and to increase the vital powers of our patients, naturally low. No doubt the combination of Bromide with Cannabis of India is the least injurious of all our sedatives, and no doubt there are many cases in which it is necessary at any cost to produce sleep, and it is a matter of thankfulness when that can be done with any medicine as harmless as this combination.

I have, however, often found another medicine, more pleasant to take, not less effective in its operation, and advantageous in its tonic effects, fully as conducive to sound sleep in violent mania, and that is a bottle of the very best Scotch ale, or the best Dublin stout, and it is a medicine that will bear repetition with the best results. It will not often have to be given compulsorily, as the Bromide has, and no straight jacket in the world will contribute better to quietness and repose. After all that can be said of sedatives, or for any drugs, I believe the best treatment consists in kindness, good and abundant food, and plenty of work and out-door exercise.

I append Dr. Lett's report:—

"To the Superintendent.

"DEAR SIR,—By your desire I send you a report of the effects of medicines tried in this Asylum.

"During the past year I have tried the effects of various medicines in the treatment of insanity, and I now wish to lay before you the results that I have noticed.

"The medicines with which I have made experiments may be divided into two classes, viz., nerve sedatives and nerve stimulants. In the former class I have tried Opium, Hydrate of Chloral, and Bromide of Potash, in combination with Indian Hemp, and in the latter the Hypophosphites.

"With regard to Opium, our experience confirms the conclusions of most physicians, that the use of the drug is attended by more harm than good.

"I have made frequent use of the Hydrate of Chloral, in acute as well as chronic mania, and in both cases have met with good results, as well as with some disappointments. To arrive at a knowledge of the cases in which it will prove useful, will require long experience and repeated trials, making accurate notes of the cases so treated, and then arranging them in a tabular form, following Dr. Clouston's example. When that is accomplished, I think some valuable results will be obtained, showing what forms of disease and what conditions of the patient will be benefited by its exhibition. So far as my experience goes, I have found it valuable in all cases of acute mania, where the patient's health has not become so much deteriorated as to require the free use of stimulants, for in all the cases which have come under my observation where the patients have suffered from extreme exhaustion either on account of their excitement, want of sleep, or any other cause, the chloral has had little or no effect, and in these cases wine, whiskey, or other alcoholic stimulants were given until the patient's general condition improved. Their excitement usually yielded under xxx grain doses of the Hydrate of Chloral, when previously 60 grains had little or no effect. It would appear from this that to obtain the sedative effects, a certain amount of tone in the system is required. In all the cases where it has produced sleep and quietness, I have not noticed any of the evil effects which follow the use of opium. When given largely diluted with water, it does not derange the digestive organs, the secretions are not checked, the bowels are not constipated; there is not that drowsiness which follows the use of opium, it acts promptly, the sleep produced being as nearly natural as possible, the patient being much refreshed, and usually more quiet during the day. This I consider to be the effect of a good night's rest, the rest being the direct action of the medicine. The pulse does not diminish in volume below the normal standard, although it becomes more regular and softer. The temperature of the body appears to be lowered, but unfortunately I have not made use of the thermometer to ascertain this point correctly. It does not lose its effects by long continuance; on the contrary, I have found that diminishing the dose has been attended with the usual good results.

"I have given, accepting Dr. Clouston's valuable suggestion, Bromide of Potash in combination with Indian Hemp, and I have experienced good results from its employment, not only in cases of acute, but also in those of periodic mania. In the latter I have, on several occasions, succeeded most satisfactorily in warding off the attack, as the following case taken from the notes in my case book fully exemplifies:—

"A female aged 55, has a brother in the Asylum, admitted January 21st, 1871. For the past eight years has had an attack every fall, which lasts from four to six months. When admitted, her propensities were to wander, tear her clothes, rave about witches, singing, laughing, &c. She continued in this condition until the latter end of March, when she became as rational and sensible as ever, knitting socks and reading books all day long. On the 5th of September, up to which time she continued well, she asked me if I could not do something to prevent the usual attack from coming on. She told me she was quite sure it was commencing, and that every year, during the first week of September, the premonitory symptoms made their appearance, which lasted for about three or four weeks, gradually increasing, until, at last, they broke out into her regular maniacal excitement. She described her symptoms to me as follows:—First, irregularity of the bowels, deranged appetite, restless at night, impaired vision, confusion of ideas, and a peculiar sensation passing through the whole frame, which she could not describe; she also complained of being unable to count the stitches when setting up her knitting. I made up a mixture containing gr. x of the Bromide of Potash with M. x Fl. Ex. Cannabis Indica to the zi. of water; of this I gave her a tablespoonful night and morning; in two days all the symptoms left her, and she felt as well as ever, and implored to be allowed to continue the medicine, as it had done her so much good. I continued giving it to her for three weeks, when

I discontinued it for two days. The symptoms then, much to her alarm, began to re-appear. I again gave the medicine with the same happy result as before, and now at the very period when in former years her mania was at its highest pitch, she is happily knitting socks or reading books, keeping herself employed at one or the other from morning until night.

"Happily, as I said before, this is not the only case in which the attacks have been warded off by the employment of this remedy. In other cases that I have tried it there was no return of the symptoms if the medicine was continued during the whole period that the attack usually lasted.

"In two cases I failed to ward off the Paroxysm—this I attribute to the fact that I did not commence the administration of it early enough, letting the premonitory symptoms become too well developed and get too much head-way, but in both these cases the attacks were very much mitigated. I do not mean to say that all cases of periodic mania will show such marked improvement under its use ; but if we have at hand a remedy which will prevent the return of so dreadful an affliction even in a few cases, what a great boon it must prove to be, not only to the suffering patients themselves, but also to those who attend upon them.

"It appears to me that to derive benefit from the use of this medicine, it should be given as soon as the first symptoms make their appearance, before they have attained any degree of force, and that it should be continued during the whole period which the attack usually lasts. Nor do I think that in a patient who has had an attack warded off in this way, a future attack would be more severe or more liable to return ; on the other hand, I think it probable that if during the interval the patient is well nourished and the general condition of the bodily health improved, the number of seizures would become less if not in time completely prevented, and those which followed the treatment might be much less severe.

"In the treatment of Acute Mania I have found the combination of Bromide of Potash and Indian Hemp confirms the conclusion of Dr. Clouston, and with him can state that the appetite is not diminished but rather increased ; it does not produce dry tongue, constipation of the bowels, or diminution of the secretions, and can be continued for a long time, nor does it appear to lose its effects by continued employment.

"The evil effects of it are : first, the supposed aphrodisiac effects of the Indian Hemp, and to this cause I ascribe its non-action in cases where I had reason to suppose the patients were either masturbators or had their sexual feelings much augmented ; in such cases I have had better results with the Hydrate of Chloral.

"I have not seen its cataleptic influence produced, but where I have increased the dose I have noticed a stupidity come over the patient from which he could be easily aroused, and which passed off in a few hours when the medicine was discontinued.

"CLASS 2ND.

"In those cases where something in the shape of a stimulant to the nervous centres is required, where the temperature of the body is below par, the hands and feet are blue with cold, even in warm weather, where the patient sits motionless, answers questions in a sluggish manner, as if he did not understand what was being said to him ; and there appears to be a want of nervous energy, as in Dementia and Melancholia, I think that the preparations of Phosphorus are highly valuable, perhaps because they are nerve stimulants. I have undoubtedly seen much benefit from their employment in such cases as the following, one out of many in which I have seen good results, clearly demonstrated :—A male, 51 years of age, admitted June 10th, 1871. First attack commenced about five months ago ; a tall, well formed man ; sits in one place all day long ; will not move or go to meals unless roused by some one ; will not speak unless spoken to ; and answers questions in a low incoherent manner ; appears to take no notice of what is going on ; has a very dejected, downcast countenance ; surface of the body cold, sluggish ; cannot be persuaded to make himself useful in any way ; appetite fluctuating and bowels constipated. I put him upon great doses of the Hypophosphite of Lime twice daily. During the first three or four weeks there was little or no change ; at the end of that time he appeared to improve, and had a somewhat brighter look in his face, spoke with more decision, and

much more distinctly ; appetite became more regular, bowels not so much bound, and in a short time began to make himself useful in many ways. He gradually continued to improve, when at the end of three months he was one of the best working patients we had. He also took great interest in reading books or newspapers. He was then sent out on probation for a month, giving directions that he should still continue the medicine ; since then I have heard that he continues to progress favourably ; and, I think, in a short time, may safely be discharged cured.

"In this case as well as in several others that have been treated in a similar way, I think there was marked improvement and some cures by the use of this medicine. All increased in weight, showing that when the nerves were brought into a proper state the process of assimilation of food was much better, the secretions regulated, and the patients looked much brighter and more cheerful.

"STEPHEN LETT,
"Assistant Physician."

A few words with regard to restraint or non-restraint. On this continent I know of only two Asylums where it is not used—Dr. De Wolfe's, at Halifax, N.S., and this. No doubt much exaggeration there has been on both sides of this question. In one report I find it asked : "If a patient has to be "fed with a stomach pump, is it better to tie "the patient's hands and feet to a chair, or to have a struggle with an attendant holding "each limb? 2. It is a matter of convenience—an attendant to each limb would be in the way of the physician using the pump, and there can be no objection to the simpler and more convenient mode of tying the limbs to a chair. But then feeding a patient once or twice daily is a very different thing from seeing patients pacing corridors all day long in muffs and straightjackets, a very different thing from saving attendants personal trouble in watching patients and guarding them from mischief, if so disposed, by constant attention, rather than save all trouble by muffs and waistcoats, a still more different thing from the wire-woven cribs in which so many patients are put to sleep in nearly all the Asylums in the States, and which I have never seen required by any patients that have come under my observation.

I have had patients rushed into the Asylum without waiting for legal forms of admission, on the ground that they had to be tied to their beds, and put into straight-jackets to prevent violence to others or to themselves ; and although they are exceedingly frightened at the approach of an attendant when they first arrive here, I have never had one who has not been freed from restraint immediately, and kept free, without any harm occurring, and with great advantage, as confidence in the kind intentions of those about them was regained, of perfect quietness, and rapid improvement. I could cite many cases. One from London Gaol came here with the reputation of being the most violent woman ever seen in that gaol. She was never outrageous here, from the hour of her admission, and never required to be even secluded, and when she saw that loud threatening provoked no one, she gave that up. Another came from Simcoe gaol, rushed in on the ground that she was a dreadful woman. I never saw one more frightened, but beyond an incessant restlessness of body she never was violent here. No sedatives were given to these women, and none are ever given for mere noise or destructiveness, without some other reason to justify their administration. I saw in another report, the singular argument that non-restraint did not diminish the death rate in the English Asylums, nor restraint increase it in the State Asylums. I think it would be most surprising if it did. I cannot see what either has to do with death rate any more than Tenterden steeple with the Goodwin sands ; in truth, the whole matter is a question of attendants. With good ones, restraint can be avoided ; with bad ones it hardly can. With insufficient numbers of attendants it certainly cannot. I am sure that it dwells on their minds both when they are recovered and when their disease recurs. Often I have been told when an acute maniac has broken a window—"There, now I suppose you will put a jacket on me, or you will give me a shower bath? I have neither the one nor the other in the Asylum. No attendant has the means of applying such things to patients.

No excuse is admitted for violence by attendants. It is an inexorable rule that a discharge follows violence. I used to be content to send an attendant away when it was known he gave a black eye to a patient. Now, if a patient has a black eye the attendant

goes, because experience has shown that all the usual excuses and statements as to the manner black eyes are given are false. I believe they are always the result of a direct blow, and therefore an attendant is justly discharged where one is seen in a patient under his care.

No complaint by any patient goes uninvestigated, and the result is that few are made, and there is a general quietness and absence of violence and noise; in short, a general contentment that will contrast favourably with any institution where restraint is used. On most points I think the Asylums on this continent are far ahead of the English County Asylums; and I should like to see them as far beyond them in the matter of restraint, instead of being a long way behind them. I should not have said so much if I had not seen a tendency in some reports to sneer at non-restraint, which has made it incumbent on me to defend a system I heartily approve and constantly practise in this Asylum with the best results.

OFFICERS AND SERVANTS.

I must repeat the testimony of previous years concerning the efficiency and zeal of all the officers and servants of this Institution. Without their kind and active co-operation it would have been impossible to have passed through the labour of the year with any comfort or satisfaction.

EXPENDITURE.

The expenditure for the past year is submitted to you.

The first three months, from Oct. 1st, 1870, to January 7th, 1871, include the period of removal both from Malden and Orillia. The total expenditure for those months was \$13,347.32. In that sum are included many items that are no part of ordinary maintenance.

The expenditure from January 1st, 1871, to Sept. 30th, 1871, amounts to \$43,877.81. The grant for the use of this Asylum for 1871, was \$56,000; therefore we have \$12,122.19 to meet the expenses of the last three months of the year. This will be sufficient with the \$1000 for farm labour.

Now, taking our mean population for 1871 at 432, the cost per head on the grant would be \$129. But as the actual payments for maintenance at the end of the year will be less than the \$56,000 by \$5,500, which latter sum has been expended on stock, sheds, and other works authorized at different times, and has in reality been saved out of maintenance, I think the cost per head ought to be calculated on 50,500, when it would be \$116 per head. I have not added the interest on the capital expended on the buildings and land, as I see that no other Asylum either in England or the States does so, except Rockwood; and then Dr. Dickson obligingly adds that interest to his estimate of the cost per head of this Asylum, and then compares my expenditure with the cost per head of his own, from which this item is rigorously excluded.

There always will be a difficulty in making these estimates so long as the official and financial years begin and end on different dates. We are always including portions of two different grants.

The result is an approximate estimate rather than a complete one. It is true that on a series of consecutive years the average of each would come out accurately, but it is equally true that no single year is perfectly accurate. There is another unavoidable evil, the farm crops of 1871 cannot be known except by estimate on the 30th of September, 1871. They therefore appear in the report of 1872, or they are given in 1871, if there is time, when Parliament meets late, to ascertain them before the report is called for.

It would be far better to have the reports of the year commencing and terminating with the financial year.

GARDEN.

The produce of the kitchen garden, notwithstanding the extreme dryness of the summer and the want of sufficient manure, during our first season, has amounted at wholesale prices, to \$1,650.67. This includes 30,000 cabbages, which, retailed at five cents each, would

alone give \$1,500. I mention this to show the moderate rate at which the produce is estimated. In the flower garden more than 2,000 bulbs have been planted for next sseason, more than 1,200 hardy flowering shrubs, and more than 1,000 flowers of different kinds. In the Green House department, although the house itself has only been finished late in October, Mr. Penny has raised under glass, and now placed in the house, 2,600 greenhouse plants of much variety and very healthy, which will be ready to plant out in summer, and also to propagate from before the next season. Much remains to be done in the ornamental and flower garden before the grounds will present that beautiful appearance it is my desire they should have. Weeping trees, evergreens, shrubberies ought to be placed wherever they will show to advantage; and I hope that a further sum for ornamental purposes will be granted by Parliament. Nothing can be better bestowed, and when the grounds are thoroughly completed, days for public visiting can be set apart, which will afford the London public as well as strangers much gratification.

FARM.

The farm has been cultivated this year for the first time, with the exception of a few acres of potatoes last year. The extraordinarily dry season, drier in this neighbourhood than in other parts of the Province, has very much damaged some of our crops, chiefly potatoes, which will not reach more than one-third of a crop. The quantity at each root was more than ample, but the size extremely small.

Potatoes, 2,400 bushels, at 40 cts.....	\$ 960 00
Oats, 1,000 do. 36 cts.....	360 00
Corn, 75 do. in cob 30 cts.....	22 50
White turnips, 400 bushels 30 cts.....	120 00
Swedish turnips, 520, at 25 cts	130 00
W. B. Carrots, 2,300, at 25 cts.....	515 00
Mangolds, 6,050, at 25 cts.....	1512 00
Peas, 400 bushels, at 50 cts.....	200 00
Hay, 50 tons, at \$10.....	500 00
Straw, 45 tons, at \$7	315 00
Corn, cut green, 150 cart loads, \$12.....	300 00
Tares, 36 cart loads, \$3	108 00
Grass, cut green, 40 cart loads, \$1	40 00
Milk, 39,652 quarts for nine months actually got. 47,609 do twelve do.	
Butter, 2,060 lbs. for the nine months, actually got. 3,072 estimated for twelve months.	
Milk, at 4 cts. per quart	1,904 36
Butter, at 20 cts per lb.....	614 40
Garden	1,650 67
	<hr/>
	\$9251 93

There are a few other small productions that might be added. I have included the value of 30,000 cabbages, partly grown on the farm in the garden produce. We have 22 cows, 2 oxen for draught, 10 horses, 19 steers for fattening, 81 sheep for fattening, 104 pigs, poultry, geese, &c.

The value of farm and garden produce, amounts to	\$9251 93
Farm labour, etc.....	3780 00
Garden labour	720 00
Estimated Patients' labour.....	2352 00
	<hr/>
	6,852 00

Profit.....\$2,399 93

The cost of paid labour exclusive of that expended on work provided for by special grant, such as draining and fencing, amounts to four men's regular monthly wages, at \$28 per month each.....		\$1,344 00
per annum.		
Farm bailiff.....	300 00	
which I hope it will be in future years.....	1,644 00	
One dairy woman.....	96 00	
Total paid labour.....		\$3,384 00

The labour of the patients is additional, but I know not on what principle it can be valued so as to be charged against the farm. The Asylum has to maintain them whether they labour or not. Their labour keeps them in health and saves the Asylum the cost of sickness. Their labour is not equal, taking the total of patients more or less employed, to three patients to one paid labourer. Even then large deductions should be made before putting a money value on the labour; and I am unable to give a fair estimate of it. Although there are many days 70 or 80 patients employed, many of them are in occupations about the house, and engine rooms and doing many small things, so that I am confident that all the year round, a full estimate would be 20 men on the farm and garden employed *de die in diem*, calling them seven able-bodied men, at \$28 per month each, the sum would be \$2352. I am sure any farmer would get more work out of six well paid hired labourers. However, taking that as their money value, the farm and garden this year have yielded more than double the cost of cultivation. Upon this fair statement of yield I wish to urge upon you the advantage of buying the Priest's farm adjoining, 75 acres, for if it were in our hands for pasturage, it would free the whole of our present lands for crops. I have no doubt that all the meat could be raised on this farm that the Asylum would require, in the course of two more years' time, and very likely a great deal more than that if the sewage can by any workable scheme be utilized. As far as the fluid portions of it, there is little difficulty for the slope of the land near the reservoir admits of its application easily, when pumped up by one of the cheap windmills in use in various parts of the country. I have already called your attention to this subject, and I beg also to refer you to a memorandum on the value of the Priest's farm if the Government will purchase it. The only other subject I need allude to is the nature of the farm accounts which are very unsatisfactory to me. I cannot avoid urging you to set apart a capital sum for farm, equivalent to what in England would be a tenant's capital on entering into occupation, letting the Government stand on the footing of the landlord, and doing as landlords do—all the permanent work, such as buildings, and drainings, taking care that the former are commensurate to the wants of a farm of this size, and that rent be charged to the Asylum, on the capital cost of farm buildings and draining. I do not think the rent so charged ought to exceed the landlord's rate per cent. in England, or the rate at which farms are rented in this country, because the Government investment in lands for an Asylum cannot be considered as done only for farm profit. It is done mainly for the health and welfare of the patients, and that health and welfare must be estimated at a money value in the consideration of rent or interest on the capital the Government expends; therefore the Government cannot fairly look for the customary interest of this country in the shape of rent.

Having charged the farm this yearly sum, and set apart a working capital distinct from maintenance, it would be easy to see at what profit the farm is worked, for every expense should be charged against the working or tenant's capital, and every part of the produce should be paid for by the Asylum out of the maintenance grant. This would enable us to see easily the cost of our farming, and the value to the Asylum of its produce, as at the end of the year all excess of money so paid for produce by the Asylum, over and above the amount of working capital and interest on it, would be paid as farm profits to the Treasury. The difference being that the money would be paid out of our farm account instead of out of maintenance. But the result would be that the farm would show at a glance what it does, whereas at the present time a most ingenious investigator of accounts would fail to find out what the farm costs, what belongs to maintenance Asylum accounts, or what to the farm. I do not know whether the plan is possible or consistent with the

arrangement of the Government accounts or not, but I earnestly recommend it to your consideration.

I am sorry that my report extends to such a length. I am afraid that it will not meet with such attention by the public as the subject deserves, and I have no doubt that the fault will fittingly be much my own, for the defects of place and style are too apparent to me.

I have the honour to be,

Your obedient servant,

HENRY LANDOR, M.D.,
Superintendent.

REPORT

OF THE

PRINCIPAL

OF THE

INSTITUTION FOR THE DEAF AND DUMB,

BELLEVILLE.

J. W. LANGMUIR, ESQ.,
Inspector of Asylums, Prisons, &c.,
Toronto.

SIR,—In accordance with the requirement of the Statute, I have the honour to submit to you my first annual report, showing the operations of the Ontario Institution for the Deaf and Dumb, in its several departments, from the 20th of October, 1870, to the 30th of September, 1871.

The formal opening of the Institution took place on the 20th of October, 1870, in the presence of His Excellency the Lieutenant-Governor, the Honourable the Attorney-General, the Honourable E. B. Wood, Treasurer, and other distinguished persons representing different sections of the Province. From that time until the close of the term (June 28th, 1871), the number of pupils in attendance was as follows:—

Males	47
Females	23
Total.....	70

They were supported as follows:—

By parents or friends.....	39
“ the Government of Ontario, as orphans	7
“ Municipalities :	
County of Brant.....	1
“ Carleton	1
“ Hastings	2
“ Huron	2
“ Lambton	3
“ Norfolk.....	1
“ Northumberland and Durham. .	7
“ Peel	1
“ Wellington	1
“ York	1
Township of Innisfil	1
“ S. Monaghan	1
Town of Belleville	2
	—24
Total.....	70

The present term commenced on the 6th of September, 1871. From that time until the 30th of September, 1871, the close of our fiscal year, the number of pupils who have entered the Institution is as follows :—

Males	64
Females.....	36

Total..... 100

They are supported as follows :—

By parents or friends.....	47
“ the Government of Ontario, as orphans	8
“ Municipalities :	
County of Brant.....	3
“ Carleton	1
“ Grey	2
“ Hastings.....	3
“ Huron.....	9
“ Lambton	2
“ Norfolk.....	3
“ Northumberland and Durham...	8
“ Ontario.....	1
“ Peel.....	1
“ Simcoe.....	1
“ Wellington.....	4
“ York	1
Township of Innisfil “ Simcoe	1
“ Tay “	1
Town of Belleville “ Hastings	3
Village of Cayuga “ Haldimand.....	1 45
Total	100

The total number of pupils who have entered the Institution, from its organization to the 30th of September, 1871, is,—

Males	70
Females.....	37

Total..... 107

They reside in the several counties and cities of the Province, as follow :—

Brant	5	Oxford	1
Bruce	1	Peel	2
Carleton	3	Perth	5
Elgin.....	1	Peterborough	1
Essex	1	Prince Edward.....	1
Grey.....	2	Russell	2
Haldimand.....	1	Simcoe	6
Hastings.....	6	Welland.....	2
Huron.....	11	Wellington.....	6
Lambton.....	6	Wentworth.....	2
Lanark	1	York.....	1
Leeds and Grenville	1	Hamilton	1
Lennox and Addington.....	1	Kingston.....	1
Lincoln.....	1	London	1
Middlesex.....	8	Toronto	4
Norfolk.....	5	Dalhousie, N. B.....	1
Northumberland and Durham.....	13		
Ontario.....	3	Total.....	107

The following tables will show the nationality, religion and occupation of the parents of our pupils:—

Nationality.

Canada.....	33	United States.....	2
Ireland.....	26	Indian (Canada).....	1
England.....	21	Unknown.....	7
Scotland.....	14		
Germany.....	3	Total.....	107

Religion.

Presbyterian.....	32	Congregationalist.....	1
Church of England.....	27	Lutheran.....	1
Methodist.....	25	Unknown.....	7
Roman Catholic.....	6		
Baptist.....	6	Total.....	107
Christian Disciples.....	2		

Occupation.

Blacksmiths.....	2	Miller.....	1
Boarding-house keeper.....	1	Millwright.....	1
Brickmaker.....	1	Nurserymen.....	1
Carpenters.....	4	Painters and decorators.....	2
Coopers.....	2	Plasterer.....	1
Currier.....	1	Sail-maker.....	1
Draymen.....	3	Sheriff.....	1
Farmers.....	55	Shoemakers.....	2
Fisherman.....	1	Tailor.....	1
Governor of Gaol.....	1	Teacher.....	1
Gunsmith and locksmith.....	1	Tavern-keeper.....	1
Gentlemen.....	2	Washerwoman.....	1
House servant.....	1	Yeoman.....	1
Ironmonger.....	1	Unknown.....	3
Labourers.....	10		
Merchants.....	3		
	86	Total.....	107

The following statement will show the number of pupils who had attended other schools for the Deaf and Dumb, previous to entering this Institution:

SESSION ENDING JUNE 28TH, 1871.

Attended Mr. McGann's school.....	36
“ other schools.....	3
Total.....	39

PRESENT SESSION.

Attended Mr. McGann's school.....	37
“ other schools.....	3
Total.....	40

Total admissions for year ending September 30th, 1871 :

Attended Mr. McGann's school.....	41
“ other schools.....	4
Total.....	45

Number who had not attended any School for the Deaf
and Dumb 62

It will be seen from the above statement that a large number of deaf mutes attended the Institution under the management of Prof. J. B. McGann. He was the pioneer in the establishment of a Deaf Mute School in Ontario. He commenced the School in Toronto, in June 1853, removed to Hamilton in 1854, and continued the School until July, 1870. During that period about one hundred and eighty deaf mutes were under instruction, and a great interest was excited throughout the Province in the work of deaf mute education, through the efforts of Mr. McGann and his associates.

—Soon after I took charge of the Institution I became aware, from the information gathered from reports in your office and from Mr. McGann, that there were a great many deaf mutes in the Province of the proper age to attend school, who were growing up in ignorance. You had, in 1870, sent out a circular to the clerks of all the municipalities in the Province, requesting them to send you the names, ages, circumstances of parents or guardians, etc., of all deaf mutes within their knowledge. From the meagre and incomplete returns received by you in response to this circular, I saw that some other course must be adopted to ascertain as nearly as possible the correct statistics of the deaf and dumb, for whose benefit the Institution had been established.

I prepared the following circular and sent a copy to ministers of the several religious denominations, editors of newspapers, members of the Provincial Legislature, Wardens and Clerks of Counties, and other persons whom I was assured would take an interest in the matter:—

“ONTARIO INSTITUTION FOR THE DEAF AND DUMB,
“BELLEVILLE, January 12th, 1871.

“DEAR SIR,—I respectfully ask your attention to a few remarks in behalf of the deaf and dumb of the Province of Ontario, for whose education and improvement this Institution has been established. Having been appointed Principal, I desire to inform myself, fully, as to the number of this unfortunate class in the Province, of a suitable age to enter school, so that the necessary steps may be taken to secure their admission into the Institution.

“As you have an extensive acquaintance in your County, you can, doubtless, ascertain whether or not there are any deaf mutes who should be sent here. As ample provision has been made, we are prepared to receive all deaf and dumb persons between the ages of *seven* and *nineteen*, who are not physically or mentally imbecile, and any information as to the terms of admission, etc., will be cheerfully given upon application to me by letter or otherwise.

“In remote sections of the Province many deaf and dumb persons grow up in total ignorance, simply because their parents or friends are either unaware of the advantages of instruction, or because they are unwilling to dispense with their labour during the period in which they could acquire an education. Sometimes they are influenced by a foolish and prevalent notion that their unfortunate offspring will not be properly cared for if sent to the Institution. Many of the parents, also, of this class are poor, and know little or nothing of the provision which has been made for the instruction of their children. It is, therefore, important that special effort be made to secure the admission into the Institution of every one of these unfortunate persons.

“I ask the aid of all good people of the Province of Ontario in this work. If they will interest themselves in the matter, and see that all these afflicted children are sent here to be educated, we will then be enabled to accomplish the noble end for which this Institution was designed.

"Please inform me as to the name, age, condition, name of parents and post office of any deaf mutes within the limit of your acquaintance.

"Very respectfully,

"W. J. PALMER, *Principal.*"

Nearly all the newspapers in the Province either copied the circular or called attention to its contents. I received gratifying responses to many of the circulars sent, and in this way, and from other sources previously mentioned, I find that there are two hundred and twenty-five (225) deaf mutes in the Province of Ontario, in addition to those who have attended the Institution during the past year; and of this number one hundred and ninety-eight are under the age of twenty-one years.

Just here permit me to remark that there are many deaf mutes over the age of twenty-one years who would be greatly benefitted by instruction. That they have grown up in ignorance is no fault of their own, and I would recommend that the rule regarding the age for admission be suspended in such cases as it is shown that the applicant is well behaved and evinces an aptitude for receiving instruction.

The following table will show the number of deaf mutes reported from the several Counties and Cities in the Province:—

Brant.....	4	<i>Brought forward</i>	117
Bruce.....	4	Oxford.....	2
Carleton.....	10	Peel.....	1
Elgin.....	10	Perth.....	7
Essex.....	1	Peterborough.....	9
Frontenac.....	1	Prescott and Russell.....	1
Grey.....	6	Prince Edward.....	2
Haldimand.....	1	Renfrew.....	7
Halton.....	4	Simcoe.....	11
Hastings.....	7	Stormont, Dundas and Glengarry.....	7
Huron.....	8	Victoria.....	2
Kent.....	10	Waterloo.....	1
Lambton.....	2	Welland.....	10
Lanark.....	3	Wellington.....	6
Leeds and Grenville.....	1	Wentworth.....	9
Lennox and Addington.....	4	York.....	9
Lincoln.....	5	Hamilton.....	7
Middlesex.....	16	Kingston.....	2
Norfolk.....	2	London.....	1
Northumberland and Durham.....	13	Toronto.....	14
Ontario.....	5		
	—	Total.....	225
<i>Carried forward</i>	117		

I had hoped that the completion of the census returns would enable me to gain additional information on this subject, and I have no doubt but that when this is done a large number will be added to those already reported.

With the information before us that there are so many deaf mutes in the Province who are growing up in ignorance, the question naturally arises, what steps shall be taken to bring these unfortunate children under the influence of proper training and instruction? That they should be educated is an undeniable fact; for, without education, they are not responsible either to the moral or civil laws. I have known several instances where deaf mutes have committed serious crimes, and when brought to trial the judicial officers could not decide that they were responsible to the law, and the consequence was that they were released.

According to the English Common Law uneducated deaf mutes have been held to be incapable of understanding the nature of a trial, and when they commit a crime are confined as lunatics or other dangerous persons not responsible to the law. I learn that there is now confined in the Rockwood Lunatic Asylum at Kingston a young man, a deaf mute, who committed an awful crime, and there are other instances where uneducated deaf mutes have been brought to trial in the courts of the Province for lesser crimes.

It is my duty to call your attention to this matter, and I trust you can devise some plan by which these unfortunate children can be rescued from a life of ignorance, and made good and useful members of society.

Several instances have come under my observation during the past year where parents have refused to send their children to school, even when provision had been made for their support at the Institution. They did not appreciate the advantages of an education, and were unwilling to be deprived of their labour at home; and thus these unfortunate children are compelled to remain in ignorance on account of the culpable indifference of the parent to their welfare.

In the organization of our Institution, we have adopted the system of instruction pursued in all of the older Institutions in America. We are venturing upon no new and untried plan, but are pursuing a course which has stood the test for years, in the school of experience, among the most eminent men who have engaged in the work of deaf mute instruction.

In commencing to acquire an education, the hearing child has a great advantage over the deaf mute. The first understands our language and can express his thoughts through the medium of vocal speech, while the deaf mute with a mind equally as bright and active is denied this privilege. The sign language, the natural language of the deaf and dumb, supplies the proper means of communication, and through this medium they are made to understand written words and to use them correctly. The utility of the sign language is well described in the last Annual Report of the Principal of the Ohio Institution for the Deaf and Dumb. He says: "The use of good scaffolding must attend the erection of every building. As scaffolding is in architecture, so is the sign language in deaf mute education, and only tyros in architecture or education would dispense with either. The ripener the experience, the deeper the conviction comes of the necessity and usefulness of the sign language, and in its use we find the corner-stone of all deaf mute institutions. The cultivation of it, and its effective use, is the only peculiar, although not the chief, qualification of the teacher. He will teach written language by the sign, laying aside the latter as soon as the ready use of the former has been secured. It is not necessary to descant upon the beauty, the grace or the power of the sign language. The mute has no other, and the teacher must use and improve it as best he may.

"The subject of teaching deaf mutes through the medium of articulation has attracted considerable attention for several years past. It is claimed by some, that the system of instruction by signs is not the best system for imparting instruction to the deaf mute, but that he should be taught through the medium of articulation. This system is now being fully tested in several institutions in the United States and Europe.

"The whole subject was fully discussed in the Conference of the Principals of American Institutions for the Deaf and Dumb, held in Washington in July, 1868, and at the convention of American Instructors for the Deaf and Dumb, held in Indianapolis, Indiana, in August, 1870, and the general conclusion arrived at was, 'that while the system of instruction, as pursued in American Institutions for the past fifty years, is best adapted to instruct deaf mutes as a class, it was the duty of all deaf-mute Institutions to provide for imparting instruction in articulation to semi-mutes, and those who lost their hearing at an early age, and such others as develop a talent for receiving this kind of instruction.'"

We have among our pupils about twelve answering to this description; and it is my intention, at the commencement of the year, to organize them into a class, and give them special instruction about two hours in each day. For the present, this class can be placed in charge of one of our present corps of teachers. When a sufficient number shall enter the Institution to form a separate class, I would recommend that you authorize the employment of a suitable person as teacher, who shall visit several Institutions where the greatest success has been achieved through this system, and thus become well prepared for teaching in this department.

While using every means in our power for the intellectual training of our pupils, we should remember that a large portion of them are poor, and have no means of obtaining a livelihood after completing their education. Mr. Jacobs, the late distinguished Principal of the Kentucky Institution for the Deaf and Dumb, in one of his reports, says:—"Intellectual education, whether of deaf mutes or speaking persons, unless accompanied with industrial training and qualification to obtain a livelihood, is not a benefaction." If this is true, and it cannot be successfully denied, do we not assume a great responsibility if we develop the intellectual faculties of those committed to our charge, and neglect to make the education we have

imparted a source of lasting good. Deaf mutes cannot, except in rare instances, enter any of the learned professions, and comparatively few develop that peculiar talent necessary to enable them to engage in any of the fine arts, as a means of support, after leaving school.

There is in Belleville a notable exception to this rule. I allude to the Messrs. MacLellan, Barristers, Attorneys at Law, &c. They were educated at the Institution for the Deaf and Dumb, in Glasgow, Scotland, of which Mr. Duncan Anderson was Principal for nearly fifty years. They have been for several years engaged in the practice of the profession of law, with marked success.

There are many whose capacity for acquiring a finished education is quite limited, but who would succeed well in learning a mechanical pursuit. I would earnestly recommend the erection of a suitable building for shops and the employment of competent men to teach the trades of carpentering and cabinet-making, shoe-making and tailoring, and that a certain portion of time be allotted each day to mechanical instruction.

We have at this time eight of the male pupils working at the carpenter's trade, under the instruction of Mr. Henry Creber, an old and experienced workman, and they take a great interest in their work, and are, so far, succeeding very well. They are, as you are aware, doing all the repairs and improvements necessary about the buildings and premises. At this time, several of them are engaged in painting, glazing, and fitting in the outside sash, in the north, east and west windows of the building, and several in erecting a piggery, and such sheds, porches and covered ways as will be necessary before the winter.

Out of school hours, the male pupils, who are not engaged in the carpenter's shop, have been employed at work on the farm and garden, and other work about the premises. I have been very much gratified at their readiness and willingness to perform such work as was assigned them.

The female pupils are under the special care of the matron, Mrs. Keegan, out of school hours. They are employed in sewing, knitting, and such other household work as they are fitted to perform. Our desire is to give them a knowledge of such domestic accomplishments as will be useful to them when their education is completed in the Institution, and they return to their respective homes. Mrs. Keegan is devoting herself to her duties with diligence, and commands the love and respect of those under her charge.

As no housekeeper has been appointed as yet, I have assigned to Mrs. Terrill, one of our teachers, the duty of looking after the clothing of the male pupils, &c. She has performed this additional work cheerfully, and to my entire satisfaction.

In the organization of a new Institution, where a majority of the pupils have had but little previous instruction, it is quite difficult to effect a proper classification. The school is at present divided into six classes, taught by Mr. J. B. McGann, former Principal of the Deaf Mute Institution in Toronto and Hamilton; D. R. Coleman, M.A., formerly a teacher in the North Carolina Institution for the Deaf and Dumb, and the Blind; Samuel T. Greene, B.A., a graduate of the National Deaf Mute College, Washington, D. C.; Mr. James Watson and Mrs. J. G. Terrill, formerly teachers in Mr. McGann's school; and Miss Annie Perry, of Cobourg, who was for some time a pupil in the New York Institution for the Deaf and Dumb, but never taught before. They are devoting themselves to their respective classes with great interest, and the progress made by their pupils has been quite satisfactory, as was clearly shown in the several examinations held before large and intelligent audiences during the past year. Miss Perry has been teaching only about one month as yet.

The teachers are required to assemble weekly for practice in the sign language, and the consideration of such matters as pertain to the proper discharge of their duties. These meetings have been quite interesting, as well as profitable, and will enable us to have almost a perfect uniformity in our system of instruction. It gives me pleasure to state that all of our teachers are labouring cheerfully to accomplish this result.

Our pupils assemble in the chapel every morning and afternoon, when the school is opened by prayer in the sign language. On Sabbath I lecture to them in the morning, and one of the male teachers in the afternoon, and in addition to this, those who are able to understand it, recite a lesson in Scripture history.

A large class of our pupils are instructed in drawing by Mr. George Ackerman, and some of them have evinced a remarkable talent, which should be cultivated. Considering the fact that they are under instruction in this department only about three hours in each week, their progress, so far, has been quite satisfactory.

The farm has been under the management of Mr. P. F. Canniff, who has displayed a commendable zeal and energy in the discharge of his duties. When you consider the fact that most of our farm is poor and partially worn out, and a stiff clay soil, and has not been under cultivation for several years, and besides this was producing an abundant crop of weeds and thistles, and encumbered with a large quantity of stones of all sizes, also the fact that there has been scarcely any rain during the summer, you will see that our farming operations have been attended with great difficulty. We had the past season only about eight acres under cultivation, and raised about six hundred bushels of potatoes, besides a quantity of cabbage, carrots, beets and other garden vegetables, which afforded us material aid during the summer and fall. We also saved about five tons of hay and oats (in the straw), which will afford us considerable help towards feeding our stock during the coming winter. In addition to the manure furnished from our barn and stables, we have hauled about two hundred loads from town, also ninety loads of gravel for the improvement of our grounds, and besides this done such other hauling as was required. Before the close of the season we will have at least eighteen acres of land ready for planting next spring. It must be several years before a large yield can be expected from our farm. The land must be thoroughly cultivated and drained, and well manured.

As before remarked, during the session the male pupils can render considerable assistance on the farm, out of school hours; but the session closes late in June and they are absent during the vacation of ten weeks, which is an important season for farm work. In order to carry on the farm successfully, it will be necessary to employ regularly at least two farm labourers.

There was a small orchard on our farm which has yielded more than twenty barrels of apples. We planted last spring two hundred and fifty apple trees and fifty pear and plum trees. They are looking remarkably well, and so far but few have died. A row of shade trees, consisting of maples, elms, etc., has been planted on each side of the Trenton road, in front of the Institution grounds, and for a considerable distance along the road on the east side of our farm.

The grounds in front of our main building, embracing an area of twelve acres, have been tastefully laid out in walks and drives, and planted with evergreen and shade trees. A rustic summer house, and a number of rustic seats, have been constructed, and the walks have been covered with a thick coating of gravel. This work was done under the supervision of Mr. H. A. Englehardt, an accomplished landscape gardener, and reflects credit upon his taste and skill. It will be necessary to plant a number of trees this fall, to replace those which died, owing to the dry weather of the past summer. We should also plant a number of ornamental shrubs and flowering plants next spring.

It gives me pleasure to state that the general health of our pupils has been good. We have been visited by no diseases of an epidemic nature; and such cases of illness as have occurred, have been treated successfully by our physician.

A sad accident occurred during the vacation, resulting in the death of one of our pupils. James Brady, a lad about twelve years of age, was drowned in the St. Clair river, at Sarnia, his home, while bathing, on the 14th of August last. He was one of our most promising pupils, and his loss is very much regretted.

The books and maps purchased for our library have afforded a great amount of pleasure, as well as instruction, to our pupils. We have laid the foundation for a good library. The stereoscopticon and views accompanying have been the source of much enjoyment and amusement. The beautiful and varied collection of German chromo paintings have been greatly admired, and give a cheerful appearance to the rooms in which they are placed. I would recommend, during the coming year, the purchase of a small amount of apparatus, for the purpose of illustrating simple experiments in natural philosophy and chemistry; also, some additional books for our library. It is my intention to begin the collection of a museum, and for this purpose I will solicit contributions of stuffed birds and animals, mineral and vegetable curiosities, &c.

As the building designed for a girl's play-shed has been converted into a laundry and ice house, and the one for the boys into a store-room, wood house and carpenter's shop, we have no suitable place for the pupils to amuse themselves during inclement weather, and especially during the leisure hours of the coming winter. Children need a sufficient amount of recreation, and if the sitting and school-rooms are used for this purpose, the furniture and fixtures

will be very much damaged. I would recommend the erection of a suitable building or buildings, to be used as a gymnasium, so that our pupils may have ample means for the recreation so necessary out of school hours.

The bakery has been completed, and furnished with suitable fixtures. I would recommend the introduction of a good range, instead of the stoves now in use. This would render our cooking arrangements quite complete. The engineer has put in the gas pipes throughout the building, and the necessary fixtures have been ordered. When the main pipe, which is now being laid, is completed, forming a connection with the gas works in Belleville, we will be enabled to use gas, instead of coal oil, the use of which is attended with so much danger and inconvenience. The insertion of another boiler, and the change now being made in the pipes conveying steam through the building, will, I think, furnish sufficient heat to keep the entire building comfortable during the coldest weather.

In July last, while in Montreal, I visited the several Institutions for the deaf and dumb in that city. I was cordially received by Sister Mary, Directress of the Catholic Girls' School, and Abbe Belanger, Director of the Catholic Boys' School, both of whom seemed very much interested in all matters pertaining to the education of deaf mutes. I called on Mr. Widd, Principal of the Protestant Institution for Deaf Mutes, and was sorry to find that he was absent from the city. I have had the pleasure of a visit from him since that time, and was glad to find that he was an earnest co-labourer in the cause of deaf mute instruction.

The editors of the following newspapers and periodicals have kindly sent them to the Institution free :—

The Courier, Trenton.
The Church Herald, Toronto.
Goodey's Lady's Book, Philadelphia.
Appleton's Journal, New York.

The Deaf Mute Home Circle, Nebraska.
The Mutes Chronicle, Ohio Ins. for Deaf and Dumb.

These gentlemen are entitled to our warmest thanks, and we hope the good example they have set will be followed by many others.

I feel under obligations to the members of the press throughout the Province for their many kind notices of our Institution, and especially to the editors of the papers published in Belleville, for the lively interest they have manifested in the Institution and all measures calculated to promote its prosperity and usefulness.

To the people of Belleville I feel very grateful for the many acts of courtesy and kindness extended to the officers and pupils of the Institution.

I also feel under obligations to the Managers of the Grand Trunk, Great Western, Prescott and Ottawa, Northern and Midland Railways, for their kindness in furnishing free return tickets to our pupils, on their return to school at the close of vacation.

You will find herewith enclosed a detailed statement of the expenditure of the Institution to the 30th of September, 1871. You can readily understand that it was impossible to keep the expenditures within the limits prescribed by the estimates during the past year, as many sources of expenditure arose which were not anticipated when the estimates were prepared.

I beg leave to call your attention to the satisfactory manner in which Mr. Angus Christie, steward and book-keeper, has discharged the varied and responsible duties pertaining to his office. He is a faithful and efficient officer.

There are many other matters to which I might call your attention in this report, but your thorough and complete inspection at different times has made you familiar with our wants and requirements.

In conclusion, permit me to return you my sincere thanks for the cordial and hearty support you have always given me in all measures calculated to advance the interests of the Institution committed to my charge. We have abundant cause of gratitude to the "Giver of all good," for the success which has attended our labours so far. Commending our Institution, and all its interests, to His care, this report is respectfully submitted.

Your obedient servant,

W. J. PALMER,
Principal.

ONTARIO INSTITUTION FOR THE DEAF AND DUMB,
 Belleville, September 30th, 1871.

REPORT

OF

THE WARDEN

OF THE

PENETANGUISHENE REFORMATORY.

PROVINCIAL REFORMATORY,
PENETANGUISHENE, 24th October, 1871.

To J. W. LANGMUIR, ESQ.,
Inspector of Asylums, Prisons, &c.,
Toronto.

SIR,—I have the honour to submit the following report for 1871, of the Provincial Juvenile Reformatory under my charge:—

At the expiration of the past year there were juvenile convicts	-	-	163
Admitted during the year	-	-	48
		—	211

DEPARTURES.

Discharged during the year	-	-	-	-	46
Removed to Kingston Penitentiary	-	-	-	-	2
Sentence remitted	-	-	-	-	2
Escaped	-	-	-	-	6
				—	56
					155

Average, 160.

RELIGION.

Church of England	-	-	-	-	-	59
Roman Catholics	-	-	-	-	-	56
Methodists	-	-	-	-	-	18
Presbyterians	-	-	-	-	-	13
Lutherans	-	-	-	-	-	3
Baptists	-	-	-	-	-	5
Jews	-	-	-	-	-	1
					—	155

NATIVITY.

Upper Canada	-	-	-	-	-	-	108
Lower Canada	-	-	-	-	-	-	10
England	-	-	-	-	-	-	9
Ireland	-	-	-	-	-	-	4
Scotland	-	-	-	-	-	-	2
United States	-	-	-	-	-	-	15
Halifax	-	-	-	-	-	-	3
Newfoundland	-	-	-	-	-	-	2
Malta	-	-	-	-	-	-	1
Germany	-	-	-	-	-	-	1
							— 155

PUNISHMENTS AWARDED.

	No. under Punish- ment.	Meals—Bread and Water.	No. Punished with Birch.	No. of Lashes.
1870.				
October.....	2	6		
November	2	9	3	42
December.....	2	9		
1871.				
January	10	12	6	74
February	1	3		
March	3	27		
April				
May	2		1	12
June	6	72	5	120
July	8	48	8	96
August	5		4	60
September				
	41	186	27	404

Showing in what manner the offenders were employed :—

	No.	Average.
Carpenter shop	9	8
Shoe shop	10	9
Tailor shop	24	16
Cooperage	8	6
Blacksmith shop	3	4
Farm, stables and teaming	8	8
Bakery and cook house	5	5
Dining hall and wash house	7	6
Cleaners and wing boys	12	12
Garden	3	4
Drilling stone and clearing land	5	7
New buildings	5	12
Brick making	6	6
Sawing wood, &c.,	49	56
Warden's dwelling	1	1
	155	160

NUMBER received in Reformatory, Ontario, from 1st October, 1870, to 30th September, 1871, inclusive.

No.	Name.	Age.	Country.	Crime.	Town.	County.
1	C. H.	11	Prov. Ontario.	Stealing watch.....	Barrie.....	Simcoe.
2	T. Y.	16	Do.	Larceny.....	Toronto.....	
3	A. S.	14	Do.	Do.	Cobourg.....	North. & Durham.
4	J. Q.	13	Do.	Do.	Do.	Do.
5	E. H.	15	Do.	Do.	Do.	Do.
6	J. S.	13	Do.	Do.	Kingston.....	Frontenac.
7	W. M.	13	Do.	Do.	Do.	Do.
8	J. C.	10	Do.	Obtaining goods under false pretences ...	Simcoe	Norfolk.
9	J. H.	16	England.....	Larceny.....	Sarnia.....	Lambton.
10	J. C.	13	Ireland	Do.	Kingston.....	Frontenac.
11	J. C.	13	Prov. Ontario.	Do.	Do.	Do.
12	W. R. L.	13	Do.	Breaking store.....	Cayuga.....	Haldimand.
13	J. H.	15	Do.	Larceny.....	Cobourg.....	North. & Durham.
14	C. D.	18	Do.	Do.	Sarnia.....	Lambton.
15	W. B.	16	United States.	Do.	Do.	Do.
16	H. C.	15	England	Do.	Stratford.....	Perth.
17	J. De M.	13	Prov. Ontario.	Do.	Brockville.....	Leeds & Grenville.
18	J. D.	17	United States.	Do.	Sandwich.....	Essex.
19	J. B.	15	Prov. Ontario.	Do.	Berlin.....	Waterloo.
20	A. P.	13	Prov. Quebec.	Burglary	Ottawa.....	Carleton.
21	J. D.	13	Prov. Ontario.	Do.	Do.	Do.
22	W. H. W.	16	England.....	Do.	Barrie.....	Simcoe.
23	A. M.	16	Prov. Ontario.	Horse stealing.....	Guelph.....	Wellington.
24	W. H. P.	13	Do.	Receiving stolen goods	Chatham.....	Kent.
25	P. T.	17	Do.	Breaking house and stealing	London.....	Middlesex.
26	S. C.	17	Do.	Do.	Do.	Do.
27	J. O. H.	16	United States.	Do.	Do.	Do.
28	E. S.	13	Do.	Larceny.....	Chatham.....	Kent.
29	W. Y.	11	Prov. Ontario.	Robbery.....	Stratford.....	Perth.
30	T. C.	18	Do.	Larceny.....	Whitby.....	Ontario.
31	W. R.	18	Do.	Stealing from person	Kingston.....	Frontenac.
32	J. C.	16	Do.	Felony	Brantford.....	Brant.
33	H. K.	12	Do.	Larceny.....	Whitby.....	Ontario.
34	D. I.	16	England.....	Do.	Ottawa.....	Carleton.
35	J. L.	11	Prov. Ontario.	Do.	St. Catharines.	Lincoln.
36	D. C.	14	Do.	Do.	Ottawa.....	Carleton.
37	D. C.	13	Do.	Burglary	Hamilton.....	Wentworth.
38	J. E. H.	13	United States.	Vagrancy	Sarnia.....	Lambton.
39	J. A. S.	8	Prov. Ontario.	Arson	Simcoe.....	Norfolk.
40	W. C.	16	Do.	Larceny.....	Hamilton.....	Wentworth.
41	T. E.	11	Do.	Do.	Toronto.....	
42	T. K.	13	Halifax	Do.	Do.	
43	J. H.	13	Prov. Ontario.	Do.	Do.	
44	R. K.	10	Halifax	Do.	Do.	
45	C. T. E.	17	England.....	Felony	Ottawa.....	Carleton.
46	J. B.	16	Prov. Ontario.	Larceny.....	Cobourg.....	North. & Durham.
47	C. S.	11	Do.	Do.	St. Thomas ..	Elgin.
48	M. M.	12	Do.	Malicious injury	Toronto.....	
NUMBER REPRIEVED.						
	O. H.	15	Prov. Ontnrio.	Robbery.....	Guelph	Wellington.
	J. McC.	15	Do.	Larceny.....	Toronto.....	York & Peel.

NUMBER Liberated from Reformatory, Ontario, from 1st October, 1870, to 30th September, 1871, inclusive.

No.	Name.	Age.	Country.	Crime.	Town.	County.
1	J. T.	18	Prov. Ontario.	Assault with attempt at rape	Brantford	Brant.
2	J. B.	15	Do.	Obstructing railway track	Barrie	Simcoe.
3	W. F. H.	22	Do.	Stealing money	Chatham	Kent.
4	A. D.	21	Do.	Larceny	Hamilton	Wentworth.
5	W. D.	14	Do.	Do.	Do.	Do.
6	W. J. S.	21	Do.	Forgery	Do.	Do.
7	P. C.	17	Do.	Do.	Cobourg	North. & Durham.
8	E. A.	22	Prov. Quebec.	Larceny	Ottawa	Carleton.
9	E. A.	21	Do.	Do.	Do.	Do.
10	J. B.	20	Do.	Do.	Do.	Do.
11	P. P.	22	Do.	Do.	Do.	Do.
12	J. C.	15	Prov. Ontario	Do.	Brantford	Brant.
13	E. O'B.	19	Do.	Do.	Toronto	Do.
14	S. B.	20	Do.	Felony	Do.	Do.
15	R. K.	18	Do.	Do.	Do.	Do.
16	J. G.	19	Do.	Larceny	Cobourg	North. & Durham.
17	S. B.	19	Scotland	Do.	Do.	Do.
18	A. H.	15	Prov. Ontario.	Do.	Barrie	Simcoe.
19	F. McK.	21	Do.	Arson	Ottawa	Carleton.
20	J. G.	18	Do.	Larceny	Brantford	Brant.
21	J. D.	18	United States.	Do.	Toronto	Do.
22	E. D.	15	Prov. Ontario.	Summary conviction	Hamilton	Wentworth.
23	J. S.	15	Do.	Misdemeanour	Belleville	Hastings.
24	H. C.	12	Do.	Larceny	Stratford	Perth.
25	J. S.	17	Do.	Summary conviction	Hamilton	Wentworth.
26	T. B.	19	Do.	Larceny	Do.	Do.
27	J. McG.	17	Do.	Arson	Milton	Halton.
28	J. M.	17	Do.	Larceny	Simcoe	Norfolk.
29	A. T.	19	Do.	Forgery	Pembroke	Renfrew.
30	R. J. M.	16	Do.	Larceny	Toronto	Do.
31	J. S.	15	Do.	Do.	Berlin	Waterloo.
32	C. H.	17	Do.	Do.	Barrie	Simcoe.
33	T. McL.	16	Do.	Do.	Berlin	Waterloo.
34	J. K.	16	Do.	Do.	Toronto	Do.
35	J. E.	13	England	Do.	Hamilton	Wentworth.
36	C. Y.	16	Prov. Ontario.	Do.	Cobourg	North. & Durham.
37	T. H.	17	Do.	Summary Conviction Act	Hamilton	Wentworth.
38	A. D.	12	Do.	Do.	Do.	Do.
39	M. K.	15	Do.	Do.	Do.	Do.
40	J. P. D.	18	Do.	Larceny	Brampton	Peel.
41	W. H. L.	19	United States.	Do.	Chatham	Kent.
42	H. J. Y.	18	Prov. Ontario.	Do.	Do.	Do.
43	S. T.	19	Do.	House breaking	Do.	Do.
44	W. H. A.	14	Do.	Larceny	Do.	Do.
45	J. D.	17	Do.	Felony	Brantford	Brant.
46	C. T.	14	Do.	Stealing money	Sandwich	Essex.

GENERAL REMARKS.

In my former Reports I was enabled to state that the boys under my charge were docile and obedient to the rules of the Institution. On this occasion, I regret that I cannot speak of them so highly, as some of them during the last year have attempted to effect their escape, and five of them have but too well succeeded.

Out of those who made the attempt, five were successful. Two on the 30th May, one on the 6th June, and two on the 25th August. The two first effected their escape by scaling the wooden enclosure during school hours.

Regarding those who made their escape on the 6th June, I submitted the following report for the information of His Excellency the Lieutenant Governor:—

“PROVINCIAL REFORMATORY,

“Penatanguishene, 28th June, 1871.

“SIR,—I have the honour to Report for the information of His Excellency the Lieutenant Governor, that on Tuesday, the 6th instant, about half past one o'clock p. m., while Mr.

Featherstonhaugh, the Steward, and myself were dining, seven boys attempted their escape from the Reformatory. Those boys were employed in doing kitchen work, also in the dining hall and wash shed, and were under the supervision of the Steward whose absence they took advantage of and scaled the front fence. The ring-leader, Glenn, was locked up in the dark cell. It was with the hope of liberating their chief that the others entered into the conspiracy to effect their and his escape. On the following day, five were captured but two are still at large. Permit me here to remark, that the board fence is not a sufficient barrier to grown men wishing to effect their liberation, but while the Judges persist in sending hardened convicts in crime, whose ages vary from nineteen to twenty-one, for a period of two or three years to this Institution, serious and grave consequences will have to be combated with. On the 17th ultimo, I received three grown men from London, convicted, at the Middlesex Assizes, of burglary and stealing, the youngest, at least 19 years of age, the oldest not less than 21, all boon companions in crime, and, since their entrance into this Institution, plotting how they can effect their escape; to add to my chagrin, Sheriff Reynolds arrived here at 2 o'clock yesterday morning with another prisoner, aged about 22 and sentenced by Judge Burnham to 4 years in the Reformatory. The Sheriff informed me he is a most dangerous character, and was in his gaol at different periods, at least, fourteen times. I was on the eve of declining to receive him, but I would probably not be justified in doing so, his removal to the Penitentiary with four or five others would be most desirable; but I will defer making any Report until I am favoured with a visit from you, which I hope may be at your earliest convenience.

"I have the honour to be,

"&c., &c., &c.,

(Signed,)

"WILLIAM MOORE KELLY,

"Warden.

"To J. W. LANGMUIR, ESQ.,

"Inspector of Asylums, &c.,

"Toronto."

It has been customary heretofore, when the boys are mustered for work at 1 o'clock, to allow the Steward one hour for dinner, this rule has prevailed for the last thirteen years, without experiencing the least inconvenience from it.

Until this untoward event, I had no cause to regret the confidence reposed in the boys, it is now, however, a matter of much regret to me, that I did not report the ringleader, Glenn, as incorrigible, and recommend his removal to the Penitentiary. With much reluctance I have recourse to this extreme measure, not only on account of the unfortunate himself, but also on account of the expense of his removal. The completion of the new Central Prison will obviate those objections.

Regarding the last two boys who escaped, I must express my great disappointment, as one of those boys was with me four years and five months, and had only seven months to remain to complete the fulfilment of the term of his sentence. During last winter these boys were employed across the bay in chopping wood, and this summer they were also employed in the same locality, saving hay, and never before manifested the least desire to make their escape. I sent them and four others with Mr. Drinnan, the farmer, to Quarry Island to get stone for the new building, and he reports that they effected their escape by taking the small boat, about 9 o'clock in the evening, when on the eve of retiring to their tent for the night.

On the 14th September, the Inspector arrived at the Institution and held a court of enquiry. On that occasion, the officers gave their testimony on oath. I beg leave to say that my Report gave as full, as true and as correct statements, as were those elicited by the examination, for to me it is not only a matter of duty, but of honour to make a fair and honourable Report. Indeed, in my official capacity it will at all times be a pleasure to give the fullest information to the Government, on all matters appertaining to the welfare of this, so important and benevolent an Institution. At the visitation of the Inspector, no efforts were made to merely put on appearances; my pride, as well as my duty, is to maintain discipline at all times, and to use my best influence, and do all that lies in my power, for the reformation of the unfortunate, and oftentimes parentless children committed to my charge.

The usual good order and discipline of the Institution have no doubt been somewhat affected by the introduction of criminals whose proper quarters would be the Penitentiary. To this class of criminals I attribute all the annoyances I have been subject to this summer by runaways. I may, indeed, reasonably expect to effect the reformation of youthful offenders, but it is doubtful if I can succeed with hardened criminals. Young men who have graduated not only in the gaols of Ontario, but also in those of the United States, are, I consider, by no means fitting associates for our juveniles, who are frequently sent here for some trifling offence, perhaps the first they have committed. With such youthful offenders much good might be effected, but the chances of their reformation are considerably diminished, when brought in daily contact with old experienced offenders, and when daily exposed to the contaminating influence and advice of some of those hardened criminals, who, I regret to say, are now too often sent to the Reformatory.

Notwithstanding all the difficulties that have to be contended against, I have no hesitation in stating that I consider this Institution is fulfilling the end for which it was established, many proofs of which have come under my own observation. Though the boys on leaving at the expiration of their sentence pass out of my sight, I by no means forget them, their prosperity is to me a great source of gratification; and I can assure the Government, that almost in every town in this Province, and in some, even in the United States, can be found good and faithful mechanics, who learned their trade in this Institution, while others are earning an honest livelihood by farming. On a recent visit to a certain town in search of the last runaways, I had the unbounded pleasure to find that two of my boys had purchased considerable property, and were highly respected by their neighbours.

In all probability, two railroads will soon come into close contiguity with the Reformatory, though bringing us many advantages in other respects, they will considerably facilitate the chances of escape for those who might attempt it; I would therefore suggest the necessity of a high stone wall in place of our present board fence, which has proved quite insufficient for the safe custody of the boys, and is, in fact, almost useless.

I have the honour to be, Sir,

Your most obedient, humble servant,

WILLIAM MOORE KELLY,
Warden.

PROTESTANT CHAPLAIN'S REPORT.

REFORMATORY, PENETANGUISHENE,

23rd October, 1871.

To Her Majesty's Inspector of Prisons for the Province of Ontario :

SIR,—I think it a subject of congratulation, that, though the population of the Province has so rapidly increased during the last twelve years, the commitments to this Institution have not increased in a corresponding proportion.

It is gratifying to me to state that the general conduct of the boys in school is satisfactory; and their behaviour at morning and evening prayers during the week, and at Divine service on Sundays, is, on the whole, orderly and decorous. I am glad to observe that since we have had the Harmonium, the boys take a greater interest in the Sunday Services, and that under my son's instructions they have made good progress in singing, thus making the service more attractive, and causing them to join in it with greater spirit and earnestness.

Though I have stated that I am, on the whole, satisfied with the conduct of the boys, both in school and in church, yet I am sorry to say that, since my last Report, several have attempted to escape, and a few have succeeded. In looking for the causes of these instances of insubordination, I am led to the conclusion that offences of this nature would rarely occur if the Reformatory was strictly used for the purposes for which it was originally intended. It was certainly instituted for the reformation of youthful offenders, not for criminals of full age. The introduction of some of this latter class has had an injurious effect on the younger pris-

oners, and has, no doubt, had a great deal to do with these attempts to escape. I fear, indeed, that we shall never reap the full benefit expected from this Institution, till it is made a rule, that none be sent here above the age of fourteen or fifteen, so that on the expiration of their sentence, their age should not exceed 19 or 20.

In concluding this Report, I beg leave most respectfully to call your attention to the fact, that I have ninety boys or more in the school in the morning; a number far too great for one teacher. In answer to my enquiries on this point, an experienced schoolmaster informed me that sixty-four is the highest number in Common Schools in this country, and I find that in England, taking the average of six of the public schools, thirty-two is the highest (average) number assigned to each master. In the large number of boys which I have under my charge as schoolmaster, there are materials which (if divided according to their attainments) for at least eleven or twelve classes; but I am obliged to divide them into six only, as six classes are as many as one teacher can profitably superintend. This gives an average of fifteen boys to each class; consequently, boys of very unequal attainments and abilities are necessarily grouped together to the great disadvantage of the whole class. To remedy this great evil, I most respectfully suggest, that an assistant be provided for me to attend to the three junior classes; I could then arrange the boys in their classes according to their respective capabilities and attainments; and I have good reason to expect, that if this suggestion is acted upon, a marked improvement in the progress of the various classes, would be the satisfactory result.

I have the honour to be, Sir,

Your most obedient humble servant,

GEORGE HALLEN,

Prot. Chaplain.

ROMAN CATHOLIC CHAPLAIN'S REPORT.

To the Inspector of Prisons for the Province of Ontario.

SIR,—On the first instant there were, in the Catholic department of the Provincial Reformatory, fifty-seven boys, who during the past year, have given satisfaction by their general good behaviour.

As regards their literary attainments, they have by dint of daily application, continued, with a few exceptions, to make steady progress. These exceptions are some lads who are either idiotic or almost totally deprived of intellectual abilities.

The improvement in the furniture of the chapel has added much to the solemnity of the Divine worship, and with the aid of the organ furnished by the Government at your kind instigation, the boys have already learned to sing the praises of God in many hymns and spiritual canticles.

On the 21st of July last, His Grace the most Reverend Dr. Lynch, Archbishop of Toronto, was pleased to visit the Institution, and on that auspicious occasion, forty one of the boys received the sacrament of confirmation. As the good produced by the kind visitation of his Grace is felt to the present day, I am in hopes that his visit may be yearly repeated, especially as the facilities for travelling are now greatly improved.

I have only one regret to express,—one which I recorded more than five years ago—that young men grown up in vice should still be sent here to contaminate the younger boys and teach them evil which they never would have known. These bad boys, who should invariably be sent to the Penitentiary, together with the exceptions mentioned above, render the task of reformation and education doubly laborious. It is only by extraordinary efforts I can obtain satisfactory results under such circumstances, and were it not that I devote several days per month besides the allotted time to the advancement of such boys, I would be unable to make such a favourable Report.

I was glad to read the recommendations you made in your last Report, recommendations which exactly coincide with mine, viz., that boys under the age of sixteen only should be sent

to this Institution; that young boys should be sent for a period of four or five years, and that their dismissal should depend on the general improvement they may have made.

Should these regulations eventually be put in force, I hope that, as this Reformatory has manifested good results from its very establishment, with God's blessing, more happy results may be obtained.

I have the honour to be Sir,
Your obedient, humble servant,

J. P. KENNEDY,
Catholic Chaplain.

Penetanguishene,
16th October, 1871.

SURGEON'S REPORT.

PROVINCIAL REFORMATORY,
Penetanguishene, 6th October, 1871.

SIR,—I have the honour to state that the health of the boys has been, on the whole, good, since the date of my last Report.

With the exception of a few cases of gastric fever, I have had to attend very few cases of importance; many requiring minor surgical operations, together with an unusual number of colds, coughs, affections incidental to a scrofulous constitution, fill up the list of those whom I was called upon to attend.

We have been most remarkably free from the contagious diseases which have been prevalent in the surrounding country.

In the event of any epidemic breaking out in this Institution, the want of a convenient hospital and surgery would be very much felt and cause a great deal of inconvenience.

However, with the ever willing help of the officers, I am in hopes to pass them through the ordeal safely, as heretofore, should we be so visited.

I have the honour to be, Sir,
Your most obedient servant,

WM. R. GILMOR,
*Surgeon, Provincial Reformatory,
Penetanguishene, Ontario.*

J. W. LANGMUIR, ESQUIRE,
*Inspector of Asylums, &c.,
Toronto, Ontario.*

ANNUAL REPORT

OF THE

Commissioner of Agriculture and Public Works

FOR THE PROVINCE OF ONTARIO,

ON

AGRICULTURE AND ARTS,

FOR THE YEAR 1871.

Printed by Order of the Legislative Assembly.



Toronto:

PRINTED BY HUNTER, ROSE & CO., 86 & 88 KING ST. WEST.

1872.

CONTENTS.

	PAGE.
Commissioner's Report.....	iii
Secretary's Report.....	iv

APPENDICES.

APPENDIX A.—ANALYSIS OF REPORTS OF AGRICULTURAL AND HORTICULTURAL SOCIETIES FOR 1870*.....	2-216
APPENDIX B.—REPORT OF COUNCIL OF AGRICULTURAL AND ARTS ASSOCIATION FOR 1870..	217
Provincial Exhibition at Toronto.....	219
Table showing the number and amount of Prizes awarded in each County.....	221
Statement of the amount offered in premiums in each class, number of entries and amount awarded.....	222
Statement showing amount offered, number of entries, and amount awarded at each Exhibition from 1846 to 1870.....	223
Table showing the number and amount of Prizes in each General Class awarded to each County at the Exhibition at Toronto, 1870.....	224
Report of the Veterinary College.....	228
Financial Abstract of the Association for 1870.....	229
Provincial Exhibition at Kingston, 1871.....	229
Tabular Results of Exhibition of 1871.....	232
APPENDIX C.—REPORT OF THE ASSOCIATION OF MECHANICS' INSTITUTES, 1870-71.....	236
Treasurer's Financial Statement.....	240
Analysis of Reports of Mechanics' Institutes, (arranged alphabetically).....	241
APPENDIX D.—REPORT OF THE FRUIT GROWERS' ASSOCIATION FOR 1871.....	256
President's Address.....	260
WINTER MEETING :—Transplanting Trees ; Manures ; Report of Committee.....	264
SUMMER MEETING :—Strawberries ; Raspberries ; Currants ; Gooseberries ; Cher- ries.....	267
AUTUMN MEETING :—Display of Fruit ; Best Variety of Pears ; Red Astracan Apple ; Gooseberries ; Wilson's Early Blackberry.....	272
Fruit in Nova Scotia.....	278
Fruit in Vicinity of Montreal.....	283
Fruit in South Riding of Renfrew.....	288
Fruit at St. John, New Brunswick.....	288
Mammoth Cluster Raspberry.....	289
Gooseberry Mildew.....	290
Grapes on the Shore of Lake Huron.....	291
Secretary's visit to the Agricultural and Horticultural Departments at Washington	292
Do. to Mr. Meehan, Philadelphia.....	295

* Electoral Division Societies are arranged alphabetically and printed in capitals, with their respective Townships and Horticultural Societies printed in italics.

The Beurre D'Anjou Pear.....	296
On the Cultivation of the Grape, (Prize Essay).....	297
Fruit sent to Nova Scotia	301
A Canadian Manual of Horticulture.....	303
The Garden and the Farm.....	304
Vegetable Tissue and Fire-Blight.....	305
Importance of Shelter.....	309
Thinning out Fruit.....	311
Experiments in the Culture of Small Fruits.....	313
Report on Curculio-Catching.....	315
Fruit in the County of Renfrew.....	315
How to grow Grapes under Glass with little trouble or expense.....	316
Report on the Fruit Capabilities of Brantford and Vicinity.....	317
Report on the Lake Shore in Elgin.....	319
Report on Tree, Plants and Vine distributed by the Association	323
Fruits and Fruit Culture, by W. Saunders	326
Report on the Plum Curculio for 1871.....	338
Synopsis of Hon. Marshall P. Widder's Address.....	339
APPENDIX E.—REPORT OF THE ENTOMOLOGICAL SOCIETY OF ONTARIO FOR 1871.....	341
Annual Meeting.....	344
Treasurer's Report.....	344
President's Address.....	345
Constitution of the Society.....	348
INSECTS AFFECTING THE APPLE. (Addenda to the Report of 1870). By Rev.	
C. J. S. Bethune, M.A.	352
The Oyster-Shell Bark-Louse.....	352
The White-Marked Tussock Caterpillar.....	354
The Fall Web-Worm.....	355
The Codling Worm.....	355
INSECTS INJURIOUS TO THE GRAPE, BY W. SAUNDERS.....	357
Green Sphinx Caterpillar.....	357
Grape Vine Plume Moth.....	358
Grape Vine Flea-Beetle.....	359
The Thrip.....	359
Green Grape Vine Worm.....	360
Agrotis Depressus, Grote.....	360
INSECTS AFFECTING THE PLUM, BY E. B. REED.....	362
The Plum Sphinx Moth.....	362
The Leaf-Cutter Bee.....	364
Plum Curculio.....	366
Grey Dagger Moth.....	366
INSECTS INJURIOUS TO THE CURRANT AND GOOSEBERRY, BY W. SAUNDERS.....	367
Imported Gooseberry Saw-Fly.....	367
Native Gooseberry, or Currant Saw-Fly.....	374
Currant Geometer, or Measuring Worm.....	374
Spinous Currant Caterpillar.....	376
Green Measuring Worm of the Currant.....	377
Black Measuring Worm of the Currant.....	378

Pale Green Measuring Worm	378
Oblique Banded Leaf Roller	379
Four Striped Plant Bug.....	380
Imported Currant Borer	381
American Currant Borer.....	382
Gooseberry Fruit Worm.....	382
Gooseberry Midge.....	383
INSECTS AFFECTING THE WHEAT CROPS, BY REV. C. J. S. BETHUNE, M.A.	385
The Wheat Midge.....	386
The Hessian Fly.....	392
The Chinch Bug.....	395
The Grain Aphis.....	397
The Joint-Worm.....	399
The Angoumois Moth.....	401
The Army-Worm.....	401
The Wheat Wire-Worm.....	402
INSECTS INJURIOUS TO THE POTATO, BY E. B. REED.....	405
Three-Lined Beetle.....	406
Colorado Beetle.....	407
Insect Enemies of Colorado Beetle.....	410
Paris Green as a Remedy.....	415
The Striped Blister Beetle.....	417
Ash Grey Blister Beetle.....	418
The Potato or Tomato Worm.....	419
INSECTS AFFECTING THE CABBAGE, BY REV. C. J. S. BETHUNE, M.A.....	422
The Rape Butterfly.....	422
The Potherb Butterfly.....	424
Southern Cabbage Butterfly.....	424
The Zebra Caterpillar	425
The Cabbage Plusia.....	426
Harlequin Cabbage Bug	427
INSECTS ATTACKING THE CUCUMBER, MELON, PUMPKIN AND SQUASH, BY E. B. REED.	429
Squash Vine-Borer.....	429
The Squash Bug.....	430
Striped Cucumber Beetle.....	431
Cucumber Flea Beetle.....	432
APPENDIX F.—ANALYSIS OF CROP RETURNS FOR 1871.....	433
APPENDIX G.—AMOUNTS EXPENDED FOR THE ENCOURAGEMENT OF AGRICULTURE AND ARTS IN ONTARIO, IN 1871.....	449

ANNUAL REPORT

OF THE

Commissioner of Agriculture and Public Works

FOR THE PROVINCE OF ONTARIO,

ON

AGRICULTURE AND ARTS,

FOR THE YEAR 1871.

*To His Excellency the Honourable WILLIAM PEARCE HOWLAND, C.B.,
Lieutenant-Governor of the Province of Ontario.*

MAY IT PLEASE YOUR EXCELLENCY :

I have the honour to submit the present Report of the Bureau of Agriculture and Arts for the period included in the calendar year of 1871.

Your Excellency having been pleased to appoint me to preside over this Department, on the 20th of December, 1871, it follows that the greater part of this Report refers to matters which have taken place under the direction of my predecessor in office, the Honourable John Carling.

Respectfully submitted,

ARCHIBALD McKELLAR,

Commissioner.

Department of Agriculture and Public Works,
Toronto, January, 1872.

REPORT OF THE SECRETARY

OF THE

Bureau of Agriculture and Arts,

FOR 1871.

To the Honourable ARCHIBALD McKELLAR, Commissioner of Agriculture and Arts, Ontario.

SIR,—In submitting a brief review of the proceedings of the Department of Agriculture and Arts for the past year, it is satisfactory to be assured of the continued prosperity of the Province. On every side new enterprises are springing up, railways are being pushed in various directions into the remoter settlements, and the building trade in our towns and cities has evinced a most remarkable and unparalleled activity.

Notwithstanding the striking, and in some respects unfavourable, characteristics of the past season, which occasioned at one time serious apprehensions for the crops, it is pleasing to know that the harvest, upon the whole, has proved generally satisfactory. The drought, which succeeded a somewhat late and cold spring was no doubt unfavourable to most of the cereals, but seasonable rains occurred in time to prevent a failure. In several places hay and roots suffered materially, and turnips and potatoes particularly were very inferior. In other parts, which were more favoured as to rain, the root crops, as will be seen from the Crop Returns (Appendix F), approached towards an average; while the produce of winter wheat, both as to quantity and quality, has not been equalled for many years. The refreshing showers which so opportunely fell in several districts in the early part of summer saved the spring crops from almost a threatened destruction, and the result was an average production. Barley, which of late years has become, in many sections, a principal and remunerative crop, yielded satisfactorily, both as to quantity and quality; but the price was lower than we have been accustomed to of late, owing in great measure to the largeness of the American crop. This probably is but a temporary state of things, and should not be allowed to produce discouragement for the future. It is a widely known fact that Canadian barley possesses excellent malting qualities, and that in spite of a high tariff the Americans will continue to be large purchasers of this article. As the consumption of beer on both sides of the lines is steadily increasing, the demand for a first quality of barley must continue to augment; and our farmers will find it to be to their advantage to pay strict attention to the purity of seed and suitable cultivation.

The Dairy interest appears to be generally improving, and in some districts its development has been already almost marvellous. It will be seen from some of the reports of Agricultural Societies, that the co-operative principle is extending even to the newer districts, and that the number of cheese factories is annually increasing. This valuable and promising department of our industry is deserving of more encouragement from the Legislative Grant than it has hitherto received through the Agricultural Societies. The Commissioner made arrangements with the "*Canada Dairymen's Association*" for 500 copies of their report of last year, and in this way a wider circulation was given to the information comprised in that useful and interesting document. The price of cheese in the earlier part of the season became somewhat depreciated, but values afterwards improved. The general dry weather that prevailed must have operated more or less injuriously on the quantity, and also, perhaps, on the quality of the production. The great object our dairymen should seek to attain is to produce the best quality practicable; as a first class article will, as a rule, obtain a ready sale, both at home and abroad, at remunerative prices; whereas the manufacturing of large quantities of inferior grades must necessarily tend to lower prices, and retard the progress of this new and important branch of our rural industry.

It is a cause of thankfulness that the Live Stock of the Province have continued in a healthy condition, while the Foot and Mouth Disease prevails, though in a mitigated degree, among the cattle of Great Britain and other countries of Europe, and this dreadful scourge has not been wholly unknown in some of the neighbouring states of the American Union. There can be no doubt that our northern climate is of a bracing character, and conducive to the health of both man and beast. With an abundant supply of nutritious food and pure water, accompanied by cleanliness, ventilation and general good management, there is very little to fear in this section of the continent of the prevalence of those alarming and destructive diseases which, every now and then, visit those countries where the domesticated animals have for long periods of time been bred and kept in a confined and artificial condition. The only case of a serious character that was brought under the notice of the Department, during the past year, was a sudden attack of fever among some horses in a livery stable at Goderich, followed by inflammation of the bowels and terminating fatally in several of the animals. Professor Smith, of the Veterinary School, was deputed by the Commissioner to visit the spot as speedily as possible. The disease was reported to be non-contagious, and attributable to purely local causes, and such of the animals as were quickly removed to the open fields speedily recovered. Cases of this sort clearly shew the necessity of having capacious, well drained, and ventilated stables, particularly in hot weather; an adequate supply of wholesome water, and systematic attention to general cleanliness, so as to prevent the accumulation in and about the premises of organic matter, which, particularly in confined buildings in summer, undergoing decomposition, disengages gaseous exhalations most injurious to the health and perilous to the lives of the animals that are compelled to inhale them.

During the extremely dry weather of the summer and autumn, serious losses were sustained in several parts of the Province, by the prevalence of fires in the woods, extending, in some instances, to the destruction of the crops, fences, and even farm buildings,

but happily unattended by the loss of human life. The losses from this cause, however, bear no comparison to those experienced in the Ottawa District the year previous; and the awfully wide-spread destruction occasioned by fires, during last fall, in some of the Western States, was quite unprecedented, producing the most appalling results. As portions of our valuable forests are annually destroyed by this cause, the subject is eminently deserving the strictest investigation, with a view to applying, if possible, some practical preventive measures. In an age of rapidly advancing science, and fruitful in all manner of resources, it is surely not unreasonable to hope that some means will be discovered of reducing, at least, these tremendous losses, which have now become of periodical occurrence.

AGRICULTURAL SOCIETIES.

The numerous Societies in connection with the Department, there is good reason for believing, have been quietly and efficiently pursuing their way, and, upon the whole, these agencies have been favourable to the advancement of the most important interests of the country. Among so large a number of organizations, some, no doubt, have made but little if any progress, but their influence in the aggregate cannot have failed to produce a beneficial effect on the most indispensable and valuable industries of life.

It will be seen from the Analysis of the Agricultural Reports (Appendix A), that the desire continues to increase for uniting the strength of two or more Societies in sustaining an exhibition, and as this is permissible under the existing statute, it is better, perhaps, to leave the movement to the voluntary co-operation of the Societies themselves, which must be the best judges of what is locally most suitable, than to attempt to enforce combination by stringent enactments. It is beginning to be obvious to the more observant that a considerable number of Township Shows are of but very little account; and to make competitive exhibitions serve the higher purposes of which they are capable, their area must be enlarged, and as a consequence their material and resources must become proportionately increased. The marked success which has recently attended the District Shows of London, Hamilton, Toronto, and Guelph, clearly indicates the direction in which the improvement of Agricultural Societies lies. It is encouraging to observe in some of the Reports a distinct recognition of the necessity of an improved agricultural education of the youth of the country, and the formation, if only as yet in a few instances, of Farmers' Clubs. I have always contended that every Agricultural Society might and ought to be practically a Farmers' Club, thereby giving the members opportunities of meeting together for comparing the results of experience and for discussing questions having a local or general bearing on the advancement of their pursuits. Whatever tends to draw Farmers together for mutual help, and for the promotion of their common interests, should be regarded with favour. The establishment of periodical markets or fairs in the various centres of population has been attended by beneficial results, and as settlement and railway facilities increase, it is most desirable that such stated opportunities for transacting and extending business should be multiplied.

THE AGRICULTURAL AND ARTS ASSOCIATION.

It will be seen from the Report of the Council (Appendix B) that the late Provincial Exhibition held in Kingston was a success, and in advance of any previous show held in

that place. In the more important departments, it was not much behind in the quantity of its material, if at all in quality, the exhibitions which have taken place in more favoured localities. Financially the show was, as might from past experience have been anticipated, less successful, but even in this respect it was ahead of its predecessors in the same section, thereby manifesting clearly indications of improvement. As, however, this Institution is of a Provincial, and not of a sectional, character, and liberally supported by a Legislative Grant, it has, of course, to carry its exhibitions into various sections, so that the whole Province may, as far as practicable, participate in its benefits. One characteristic feature in the history of our Provincial Exhibition should be prominently kept in view in estimating its efficiency,—that from the commencement it has made steady and healthy progress from year to year, and, as an exposition of the principal industries of the Province, it will bear favourable comparison with similar and older societies in any part of the world.

THE ONTARIO VETERINARY SCHOOL, under the supervision of the Council, continues to make steady progress, both as to the number of its pupils, and the efficiency of the instruction imparted. This Institution is doing a valuable work for the country, sending out annually a number of young men duly qualified for the practice of their profession. As the live stock of this Province is rapidly advancing both in number and pecuniary value, the dispersion of regularly educated practitioners of the Veterinary Art is fast becoming a necessity. During the last Session of Parliament an amendment was made to the Agricultural and Arts Act, entitling the graduates of this school to professional fees in attending any court of law as witnesses in such cases as relate to their profession, and prohibiting all persons not holding a diploma or proper certificate from some duly authorized veterinary college, within or without this Province, from appending to their names the term Veterinary Surgeon, or any abbreviation thereof. The object of this enactment is not so much to prevent such persons from practising as to enable the public to distinguish between men regularly educated for the profession and mere empirics; and it is much to be desired that the public will do its utmost to prevent the enactment being violated, as is sometimes done, with impunity.

MECHANICS' INSTITUTES.

The increased encouragement given to Mechanics' Institutes by amendments made last session to the Agricultural and Arts Statute has tended, as was anticipated, to increase the number of these useful Societies. The maximum of the grant was raised from \$200 to \$400, to each Institute, and several have complied with the conditions for claiming the larger amount.

It will be seen by referring to Appendix (C) that the majority of these Institutions have devoted their funds principally to the improvement of their libraries, by adding standard works of reference on science and arts, and other publications on history, biography, geography, and travels, as allowed by statute. There can be no doubt that the formation of judiciously selected libraries, of easy access to the artisan class and public generally, in the towns and principal villages of the Province, is a powerful means of promoting the moral and intellectual improvement of the people, and of purifying and elevating the public taste. Without such aid the larger portion of the industrial and working

classes would have no opportunity of consulting works specially relating to their several avocations, as such books are generally expensive, and beyond the means of purchasing by individuals. "*The Association of Mechanics' Institutes*" renders important aid to affiliated Institutions, by furnishing them with lists of the most suitable publications, and affording information as to the means of procuring them at reduced rates ; besides other services of much practical value.

It should not, however, be lost sight of that among the objects sought to be promoted by Mechanics' Institutes, class instruction specially adapted to the wants and circumstances of working men, occupies a prominent position. As these institutions increase in age and resources, it is hoped that but few will be found without the teaching functions being largely developed. It is true that as our public system of education improves and ramifies throughout the country, the necessity of evening classes for teaching adults the rudimental branches of learning will diminish. But it is the characteristic work of Mechanics' Institutes to teach the application of knowledge acquired in ordinary schools to the practical purposes of life, including such technical subjects as specially relate to the every day pursuits of the various classes of the working population. This is already done to a considerable extent by a few of the Institutes connected with the Department, and it is much to be desired that the principle should be constantly extended.

The general experience has hitherto been that to make these institutions popular and extensively useful, amusement must be combined with instruction ; and to the absence of the former element in the earlier history of these organizations in England their comparative failure was attributed. The introduction of social gatherings, music, recreation, readings, &c., speedily effected a marked revival, and it is satisfactory to find in several of the Reports transmitted to the Department that the adoption of rational recreations has been attended by similar results in this Province. While, however, the introduction of recreations of a social and refining character in these institutions is desirable and useful, it should never be lost sight of in all attempts at improvement that their chief function consists in teaching in a popular manner the principles of those sciences, with their various applications, which appertain to the different industries of life.

FRUIT GROWERS' ASSOCIATION.

This valuable Society continues to pursue with vigour the even tenor of its way, and while as it appears from the Report (Appendix D) its membership is steadily increasing, the stated meetings it has held during the year for the consideration of Horticultural questions, and the instructive reports and papers which have been procured, clearly indicate that it is rendering substantial service to the country. Not only has it awakened a deeper and wider interest in the important subject of Fruit Culture by the practical information which it has diffused, but a successful commencement has been made of supplying to its members trees and bushes of new and improved varieties of fruits, for the purpose of testing on a large scale their adaptation to the different modifications of the soil and climate of this Province. By following up this principle for a few years with energy and judgment, there is good reason to believe that very valuable results will be obtained. Every succeeding year more plainly indicates that a wide and profitable field of industry is opening up in this direction, and that the raising of superior kinds of

fruit is destined to receive increased and more enlightened attention, affording the means of a large and profitable export, after abundantly supplying our own wants. Considering the great success which has already been achieved by this young Society, it is not unreasonable to presume that after the lapse of a few more years, it will find itself in a condition to enlarge its borders, and embrace all the departments of the beautiful art of horticulture. As settlements extend and population and wealth increase, the Association will find a continually enlarging field for its valuable and much needed operations.

ENTOMOLOGICAL SOCIETY.

Insect depredations during the past season, though extremely injurious to several kinds of fruit, have been much less destructive than for several previous years. The appearance of the Hessian fly is reported in a few places, while grasshoppers and wireworms have done mischief in others, but, on the whole, the injury inflicted has been comparatively trifling. That old and terrible foe of the farmer,—the wheat midge, still lingers in a few places, and produces local injury, but there are now whole districts which may happily be pronounced all but free. With improved culture and a practical recognition of the importance of judicious rotations, there is now some reason for hoping that ere long this Province may resume with success a larger culture of the finer varieties of winter wheat, for the production of which a quarter of a century ago it stood pre-eminently distinguished.

It having been reported to the Department last spring that the Colorado Potato Beetle had made its appearance in considerable numbers in several places of our western peninsula, the Commissioner requested Messrs. Saunders and Reed, of the Entomological Society, to make a tour of inspection through the portions of the west where the Beetle assumed a threatening appearance, to ascertain its progress and institute experiments with a view to arrest its career by means, if possible, of easy and general application. The result of their observations, with a popular description of the appearance and habits of the insect, and with plain and practical suggestions for destroying the foe, or at least mitigating its ravages, were embodied in a short report, specially adapted to farmers, which was widely distributed throughout the Province, and a number of copies was sent into other parts of the Dominion and portions of the United States.

Fortunately the injury done from this source proved very much less than was at one time threatened, the natural enemies of the insect, perhaps, together with atmospheric conditions, or other causes not clearly understood, combined to mitigate the evils of the pest, and restrict its devastations. Notwithstanding this favourable change, we have no reliable guarantee for the future. There is sufficient reason for renewed apprehension for the coming season, as the insect is well known to have been making for several years a certain rate of progress from west to east, and there is nothing in the history of its progress to justify the supposition that it will stop at the western section of the Province. Practical instruction is given in the report to enable any ordinary observer to recognize and cope with the enemy. Paris Green is recommended as the readiest and most efficient remedy—an article that can be procured from most druggists and colourmen. The Commissioner, however, in anticipation of a large and sudden demand arising for the article,

beyond what an ordinary supply could meet, made arrangements with Messrs. Lyman Bros., of Toronto, to import from England a larger quantity than usual of the article, of a reliable quality, that the public might procure it at a moderate price.

Much interesting information of a scientific and practical character relating to this insect, and others affecting the produce of the farm or garden, will be found in the Annual Report of the Society (Appendix E). The study of insects, the friends or enemies of the farmer and gardener, being of recent origin in Canada, but very few persons as yet have commenced in earnest the prosecution of entomology as a science, and what is now being done in this Province is chiefly confined to a few amateurs. The monthly Journal of the Society is most creditable to the science and industry of its very limited number of contributors; and it must be gratifying to Canadians to be assured that the former Report of the Entomological Society of Ontario, as well as that of the Fruit Growers' Association, elicited several warm commendations from writers of distinction on entomology and horticulture in Britain and America. The present Report will be found to sustain fully the character already earned by this Society for scientific investigation and practical usefulness.

EDUCATION.

In the amended School Bill of last Session several important improvements were introduced with a view to raise the standard of instruction in both the Grammar and Common Schools, thereby to meet more effectually the wants of this eminently practical age. Among the most valuable of these improvements, in which the Commissioner took a lively interest, may be specially noticed, the teaching of the principles of Agricultural Science in the Normal School, where a large number of the school teachers of the Province receive their educational training. In this way it is hoped that a wider diffusion will be given to agricultural knowledge among the youth of the country.

SCHOOL OF AGRICULTURE AND EXPERIMENTAL FARM.

During the last Session of the Legislature a proposal was made to establish in this Province a School of Agriculture in connection with an Illustrative or Experimental Farm, and a liberal grant of money was voted for the purpose of purchasing the requisite amount of land, and for the erection of school buildings. It was deemed desirable that the institution should be located within a convenient distance of the capital of Ontario, and near to a railway station, in order to afford easy access to pupils and the public, and to be as much as possible under the observation of the Commissioner of Agriculture, and others officially connected with and interested in its promotion. Accordingly advertisements were issued asking for tenders for suitable land within ten miles of Toronto, situate near a railway station; and twenty-two offers were received from various localities. To get all the requisite conditions for such an undertaking, duly combined in one place, has been found in practice exceedingly difficult, if not unattainable; various sites were examined and their relative advantages and drawbacks balanced. At length a decision was reached, and a purchase made of 600 acres of land in a block, situate close to the Mimico Station on the Great Western Railway, and only seven miles distant from Toronto. Tenders have also been accepted for the erection of the necessary School Buildings, for the

accommodation of 100 resident pupils, to be ready for occupation in the spring of 1873. The land comprises the necessary varieties of soil for illustrative and experimental purposes; from heavy clay, graduating through loams of varying composition, to a light sand. A portion of the farm being in a weedy and exhausted condition, resembling in these respects a too large area of the older settled lands of the Province, will afford opportunities for much needed experiments, with a view to obtaining reliable information as to the most efficient and economical means by which such soils can be restored to their original fertility. Most of the land would be greatly benefited by draining, and the formation of the surface, being such as to require skill and care in the execution, is admirably adapted to the giving of practical lessons to pupils in that most essential department of modern agricultural improvement.

In the carrying out of this important scheme it is proposed to combine, as far as possible, economy with efficiency. In undertakings of this nature it is an easy thing to spend money to but little purpose, and to set up utopian standards which may dazzle for a while, but which will be sure, sooner or later, to end in loss and disappointment. It is proposed, therefore, to commence and carry on the undertaking in a cautious and tentative manner. No large or expensive staff of resident teachers is contemplated, but the design is to improve and increase the facilities for imparting instruction, theoretical and practical, as time and experience may require and justify. It is to be essentially a working institution, both for the mind and muscles, open to all who desire to partake of the advantages it will offer, and on such terms as to exclude none desirous to work and learn. Its motto will be, "*Practice with Science.*" No vain attempt is contemplated to make youths intended for farming as a means of gaining a livelihood, accomplished chemists, or profound geologists, or indeed adepts in any branch of physical science, but simply to give them reliable information as to the actual results at which scientific men have already arrived, which have a bearing on agricultural practice, in connection with industrial training, and the formation of correct business habits, as will tend to qualify them for becoming on their own account, intelligent, improving and successful farmers. It is intended that the pupils shall work a portion of each day on the farm, and be compensated for their labour according to its worth. The other portion of the day will be devoted to study and attendance on class instruction specially on subjects connected with the science and practice of agriculture, and its cognate art—horticulture. In this way it is hoped that the pupils will learn to appreciate their calling as an intellectual and dignified pursuit, and that the institution will thus be the means of mitigating, at least, a serious evil of the present day,—the strong inclination on the part of young men in the country to abandon the hearths and vocations of their fathers, in order to encumber the already overcrowded walks of commerce and the professions in our towns and cities.

The easy access to the Agricultural School from Toronto will be a matter of great public convenience, affording opportunities to non-resident teachers for giving instruction in special branches of study, thereby combining economy with efficiency. In cases which are sure to arise, of pupils evincing a desire and aptitude for pursuing the higher studies of particular branches of literature and science, they could readily do so at a merely nominal expense, by attending the Technological School, or University College.

TECHNOLOGICAL SCHOOL.

The importance of providing practical instruction, based on the deductions of science, for workmen engaged in the various branches of industry, has of late occupied no small share of public attention, both in the old world and the new. Schools of science and art have been established, and in many instances liberally sustained, by all advanced and progressive countries, and the results already obtained afford satisfactory evidence of their beneficial tendency in promoting the welfare and enlightenment of the producing classes, and the consequent improvement of arts and manufactures, on which the wealth and happiness of nations materially depend. A vote of money was passed at the last meeting of the Legislature for the commencement of such an institution for the Province of Ontario, in which operatives and others engaged in the various mechanical and manufacturing arts, and such also as are interested in mining pursuits, might receive the necessary instruction specially adapted to their wants, so as to fit them to prosecute their respective avocations with intelligence and success.

With a view to give practical effect to the intention of the Legislature for the accomplishment of this valuable object with as little delay as possible, the opportunity of purchasing the Toronto Mechanics' Institute Building was embraced, an arrangement that was mutually advantageous. The School of Science will thus possess a building, of capacity and convenience in a central, and otherwise most desirable, situation, at a cost considerably lower than that at which any new structure of equal capacity and accommodation could be erected. The building is now undergoing a thorough repair, with such internal arrangements as are deemed necessary for carrying on the practical work of the new Institution. In a short time it is hoped that the School of Technology will commence working operations. As in the case of the School of Agriculture, it is intended to commence on as inexpensive a scale as is compatible with permanent efficiency, and to extend the curriculum of study as time and circumstances may justify.

In looking back on the year just closed we see, notwithstanding some drawbacks, much that is satisfactory and encouraging. A spirit of improvement continues to animate a large portion of the people engaged in the most important branches of our various industries,—agricultural, mechanical, and manufacturing,—from which we may augur the progressive advance and prosperity of the country. The increasing desire shown by farmers generally for obtaining new and improved implements and machines, ranks among the more striking characteristics of an advancing agriculture. Reaping and mowing machines are finding their way into the remoter districts, and that valuable implement, the double-furrow plough, is beginning to attract attention, and wherever it has been *fairly* tried has proved entirely satisfactory.

The necessity and advantages of draining, an operation that constitutes the very basis of agricultural improvement, are beginning to be more widely and more practically recognized; and the draining of swamp lands, under the recent Drainage Act, is already beginning to produce valuable fruits. By these means, in connection with other appliances, the fertility of the soil becomes greatly augmented, and the climate marvellously improved in point of comfort and salubrity. The increased numbers of immigrants that have arrived of late have no doubt greatly benefited the country; but the demand for labour

of various kinds, which continues to exist, has only as yet been but very partially met. Last year the character of the immigration was considerably improved, and it is much to be desired that all proper inducements should continue to be offered to the working classes of the old country, especially to small farmers and agricultural labourers, whose services are imperatively required and would prove of incalculable worth to the Province.

Respectfully submitted,

GEO. BUCKLAND,

Secretary.

Bureau of Agriculture and Arts,
Toronto, January, 1872.

APPENDIX TO REPORT

OF THE

Commissioner of Agriculture and Arts.

APPENDIX (A).

ANALYSIS OF REPORTS OF AGRICULTURAL AND HORTICULTURAL
SOCIETIES FOR 1870.

ANALYSIS OF REPORTS

OF

Agricultural and Horticultural Societies,

FOR THE YEAR 1870.

ADDINGTON.		
Dr.	\$ cts.	\$ cts.
To balance in hand.....		20 11
“ 89 Members’ Subscriptions.....		92 00
“ Legislative Grant.....		700 00
		<u>\$812 11</u>
Cr.		
By Prizes for Live Stock.....	168 25	
“ “ Field Products.....	40 50	
“ “ Dairy	10 00	
“ “ Horticultural Products.....	14 75	
“ “ Agricultural Implements.....	54 50	
“ “ Arts and Manufactures.....	85 00	
	<u>373 00</u>	
By L. G. to Township Societies.....	350 00	
“ Working Expenses.....	69 22	
	<u>792 22</u>	
		<u>\$19 89</u>
Camden.		
Dr.	\$ cts.	\$ cts.
To balance in hand.....		2 54
“ 86 Members’ Subscriptions		131 00
“ Legislative Grant.....		164 77
		<u>298 31</u>
Cr.		
By Prizes for Live Stock.....	129 50	
“ “ Field Products.....	27 00	
“ “ Dairy	7 50	
“ “ Horticultural Products.....	7 50	
“ “ Agricultural Implements.....	52 25	
“ “ Arts and Manufactures.....	28 00	
	<u>251 75</u>	
By Working Expenses... ..	30 50	
	<u>\$182 25</u>	
		<u>\$16 06</u>

Loughborough.

DR.	\$ cts.	\$ cts.	\$ cts.
To 50 Members' Subscriptions.....		\$50 00	
" Legislative Grant.....		60 00	
		<u>110 00</u>	
CR.			
By Balance due Treasurer.....		7 00	
" Prizes for Live Stock.....	59 39		
" " Field Products.....	7 08		
" " Dairy ".....	1 65		
" " Agricultural Implements.....	4 60		
" " Arts and Manufactures.....	4 60		
		<u>77 32</u>	
" Working Expenses.....		23 50	
		<u>107 82</u>	
Balance in hand.....			2 18

Portland.

DR.	\$ cts.	\$ cts.	\$ cts.
To 50 Members' Subscription.....		50 00	
" Legislative Grant.....		60 14	
		<u>110 14</u>	
CR.			
By Balance due Treasurer.....		0 74	
" Prizes for Live Stock.....	40 05		
" " Field Products.....	8 60		
" " Dairy ".....	2 00		
" " Horticultural Products.....	35		
" " Arts and Manufactures.....	25 00		
		<u>76 00</u>	
" Working Expenses.....		15 76	
		<u>92 50</u>	
Balance in hand.....			17 64

Sheffield.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		4 50	
" 54 Members' Subscriptions...		54 00	
" Legislative Grant.....		64 95	
" Miscellaneous Receipts.....		3 37	
		<u>126 82</u>	
CR.			
By Prizes for Live Stock....	58 25		
" " Field Products.....	10 60		
" " Dairy ".....	3 75		
" " Horticultural Products.....	1 75		
" " Agricultural Implements.....	15 00		
" " Arts and Manufactures.....	15 45		
	<u>104 80</u>		
Unpaid.....	0 75	104 05	

By Working Expenses.....	10 37	
	<u> </u>	114 42
Balance in hand..		<u>12 40</u>

ALGOMA.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		670 97	
“ 97 Members' Subscriptions.....		108 50	
“ Admissions to Show.....		3 90	
“ Legislative Grant.....		300 00	
“ Proceeds Sale of Seeds.....		7 00	
		<u> </u>	1090 37
CR.			
By Prizes for Live Stock.....	88 00		
“ “ Field Products.....	41 00		
“ “ Dairy “.....	29 25		
“ “ Horticultural Products.....	8 75		
“ “ Arts and Manufactures.....	34 50		
“ “ Ploughing Match.....	20 00		
	<u> </u>	221 50	
Paid on Buildings, Fences, &c.....	747 25		
By Working Expenses.....	40 69		
	<u> </u>	787 94	
			1009 44
			<u> </u>
Balance in hand.....			80 93

BRANT, NORTH.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		585 91	
“ 287 Members' Subscriptions.....		322 00	
“ Admission to Show.....		467 27	
“ Legislative Grant.....		700 00	
“ Municipal Grant.....		150 00	
“ Micellaneous Receipts.....		41 00	
		<u> </u>	2266
CR.			
By Prizes for Live Stock.....	602 00		
“ “ Field Products.....	27 50		
“ “ Dairy “.....	29 75		
“ “ Horticultural Products.....	90 00		
“ “ Agricultural Implements.....	74 00		
“ “ Arts and Manufactures.....	52 50		
“ “ Discretionary	12 75		
“ “ Ploughing Match.....	10 00		
	<u> </u>	898 50	
Unpaid.....	51 00		
	<u> </u>	847 50	

	\$	cts.	\$	cts.
By Prizes of previous year.....	89	25		
“ L. G. to Township Societies.....	323	57		
“ Preparing Show Grounds.....	122	58		
“ Working Expenses.....	267	99		
			1650	89
Balance in hand.....			615	29

REPORT.

The Exhibition was held on the 11th and 12th days of October, and was, in many respects, a highly successful one. The Agricultural Department was well represented, and some very excellent stock was on the ground. The show of horses was superior and attractive; cattle of the Durham and Devon Breeds were very fine, and some very good grade cattle were also brought forward. The sheep exhibited were principally Longwools and South Downs, with a few Merinoes, and showed no falling off from previous years. Pigs and poultry were also in considerable numbers, the former being chiefly of the Yorkshire and Suffolk breeds, but few specimens of Berkshire being visible.

Agricultural implements, carriages and waggons, of the most improved descriptions, were on view, from the Mannfactories of Messrs. Maxwell & Whitelaw, of Paris; Watson, of Ayr; Bell, of St. George; and others. These were in number and variety somewhat greater than of late years.

The display of roots, vegetables, fruits, dairy produce, home manufactures, and ladies' work, in the hall, was of superior excellence, and gave general satisfaction.

The display in the Floral Department was somewhat limited, owing to the advanced season of the year, and the fact that the Horticultural Society's Exhibition had been held a short time previously, which, doubtless, prevented some of the exhibitors from bringing forward their plants and flowers again so soon. If our exhibitions could be held somewhat earlier in the season, the two Societies might unite, and the show would then be advantageous to each.

The past season has been a remarkable one in the production of what are termed "sports" in fruits and cereals. In the garden of Dr. Lawrence, of Paris, we had the strange phenomenon of apples growing spontaneously upon a pear tree. The apple and pear trees grew in close proximity to each other, and each of them produced a large quantity of blossoms in the spring, but the fruit upon the pear tree did not form. When Dr. Lawrence gathered his apples in the Fall, he was surprised to find two specimens of fruit, resembling apples, upon the branch of the pear tree nearest to the apple tree. This fruit was sent to Philadelphia, and pronounced by scientific men there to be "Pulp, *Apple*; stem, core, and seed, *Pear*." Another gentleman in this neighbourhood has an apple tree which for years has produced Spitzenbergs, but this year, without grafting or budding, one branch has produced quite a different species of apple.

Several well authenticated instances of baldwheat becoming bearded have occurred this season. Potatoes also have been known to produce of a different colour from the sets planted. These transmutations in wheat and potatoes seem to have occurred principally among the newer and more recently introduced varieties.

The following varieties of potatoes have proved to be of excellent quality for table use, and have yielded at the rate of from 500 to 700 bushels per acre, viz.: Climax, Excelsior, Bresee's Prolific and Willard's Seedling. The Early Rose has sustained the character from which it takes its name, but is somewhat subject to rot. A new potato, now in the hands of Mr. Bennett, of Paris, selected from several hundred seedlings, possesses all the good qualities of the Old Pink-eye, with greatly improved health and productiveness.

Norway Oats, and one or two other new varieties, have also shown themselves much more productive than those of more ancient date.

* * * * *

Brantford.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....	31	51				
“ 82 Members' Subscriptions.....	82	00				

	\$	cts.	\$	cts.
To Admission to Show.....		8	12	
" Legislative Grant.....	134	68		
" Miscellaneous Receipts.....	22	85		
			279	16
CR.				
By Prizes for Live Stock.....	169	50		
" " Field Products.....	17	00		
" " Dairy ".....	6	50		
" " Horticultural Products.....	10	50		
" " Agricultural Implements.....	12	00		
" " Arts and Manufactures.....	7	50		
	223	00		
Unpaid.....	43	00		
			183	00
By Prizes of previous year.....		17	75	
" Secretary's Salary of previous year.....		30	00	
" Working Expenses.....		35	28	
			266	03
Balance in hand.....			13	13

NOTE:—The Directors report that, although the Society was not in so satisfactory a state as its best friends desired, most of the articles at the Exhibition were of excellent quality, particularly in the various departments of Live Stock, in which there was a steady improvement.

Onondaga.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand.....		0	50			
" Members' Subscriptions.....		78	00			
" Admissions to Show.....		6	85			
" Legislative Grant.....	140	00				
" Municipal Grant.....	20	00				
			245	35		
CR.						
By Prizes for Live Stock.....	142	75				
" " Field Products.....	24	25				
" " Dairy ".....	9	75				
" " Horticultural Products.....	5	25				
" " Arts and Manufactures.....	20	25				
" " Growing Crops.....	1	75				
			204	00		
" Working Expenses.....		18	23			
			222	23		
Balance in hand.....			23	12		

NOTE:—The fifteenth Exhibition was held in the village of Onondaga, and as compared with previous shows it was considerably in advance, particularly in Live Stock. Horses entered, 53; many of them very fine animals.

Paris Horticultural Society.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand.....		196	78			
" 67 Members' Subscriptions.....		67	00			
" Admissions to Show.....		89	08			

	\$	cts.	\$	cts.	\$	cts.
" Legislative Grant.....			113	57		
" Municipal Grant.....			25	00		
CR.						
By Prizes for Fruits.....	40	65			491	43
" " Flowers and Plants.....	45	75				
" " Vegetables.....	29	55				
" " Arts and Manufactures.....	46	25				
			162	20		
" Prizes of previous year.....			4	25		
" Working Expenses.....			90	54		
					256	99
Balance in hand.....					234	44

REPORT.

The President and Directors of the Paris Horticultural Society in presenting their third Annual Report beg to state that your Society during the year 1870, held both Spring and Fall Exhibitions.

That owing to the early Spring and freedom from late frost, the Exhibition held on Dominion Day will compare favourably with any previous Spring Exhibition held in Paris, not so much, your directors are sorry to state, in the number of articles on exhibition, although numbers of entries were made without the articles being brought forward, as in the quality of the articles exhibited, yet your Directors can with pleasure, congratulate your Society on the result of the Spring Exhibition of 1870, the whole entries numbering near two hundred and fifty.

The Fall Exhibition held on the sixteenth day of September was a decided success, both as to the number of entries and the quality of the articles exhibited, the whole entries numbered five hundred and seven, of which 118 were of vegetables, 102 of flowers, 174 of fruits, and 113 composed of miscellaneous, dairy produce, domestic manufactures, and extras. The flowers were excellent and received the commendation of the judges, who were professional gardeners. The fruits surpassed any former Exhibition, the apples, melons and grapes in particular, and owing to the favourable season, even a creditable show of peaches; and your directors feel proud to state that Dr. Burnett, President of the Fruit Grower's Association, who acted as one of the judges, gave your Society the highest praise for their exhibition of fruit.

* * * *

BRANT, SOUTH.

Dr.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			292	29		
" 267 Members' Subscriptions.....			267	00		
" Admissions to Show.....			625	16		
" Legislative Grant.....			700	00		
" Municipal Grant.....			100	09		
" Proceeds of Rent of Grounds, Pasturage, &c.....			183	77		
					2168	22
CR.						
By Prizes for Live Stock.....	452	75				
" " Field Products.....	54	25				
" " Dairy ".....	19	75				
" " Horticultural Products.....	53	50				
" " Agricultural Implements.....	77	00				
" " Arts and Manufactures.....	123	75				
" " Ploughing Match.....	10	00				
					791	00

	\$ cts.	\$ cts.
By Prizes Previous Year	17 50	
" L. G. to Township Societies.....	280 68	
" Balance on Grounds and Buildings.....	528 44	
" Agricultural Publications.....	28 78	
" Working Expenses.....	519 48	
		2165 88
Balance in hand.....		2 34

REPORT.

In meeting the members of the Society at the stated annual meeting, the Directors are sorry in being obliged to state that their views, as expressed at former meetings, have not been productive of the results which they anticipated, that is, the increase of its members, and consequently of its funds. While they are sorry for this, it is gratifying to be able to state that South Brant is not behind in any of its movements to promote the best interests of the County generally, the improvement of agriculture. In the pursuit of everything connected with this interest, South Brant holds its old and high position, which we hope it may continue to sustain. The number of persons enrolled as members the past year was 265, showing a decrease of 68 members from the previous year, but this deficiency did not visibly detract from the success and usefulness of the Society. The annual Show held in the month of October last, take it all together, was fully up to the average. The show of Horses was very good, much the same in number and quality as was exhibited the previous year. The same may justly be said of Cattle, &c. The Show of Sheep was considered particularly good, and acknowledged by judges an improvement on the year previous. The directors are happy to quote the opinion of a very large and respectable merchant miller on the Grain department, and to claim attention to what he says:—The show of wheat was fair, but on account of the extremely rainy and wet harvest, some of the varieties were a little sprouted, and this especially applies to the white Deihl kind. This variety is now allowed to be the best grown in this country, yet of all other kinds it is the most liable to sprout. Next in importance to Deihl is the variety known as Treadwell, and has proved itself to be well suited to the climate and soil of this country, and during the fall of 1870 brought within 5 cents per bushel of Deihl wheat. From some cause the midge-proof has degenerated. The spring wheat was poor, but of the different kinds we think the Fife wheat far the best, and brings about 5 cents per bushel more than the other varieties of spring wheat. The show of Barley was poor, indeed we might say that the crop was deficient, the quality very poor, and the price too low to remunerate the farmer, and it now becomes a matter of serious enquiry whether it is advisable under all circumstances to cultivate it in such large quantities till such time as the foreign demand is better. Oats at one period of the year were medium in quality, and promised an abundant crop, but the wet warm harvest weather brought on a rust on late sown crops, seriously affecting both quantity and quality.

The show of mechanical and agricultural implements was large and varied, and superior in quality and finish, and a visible improvement was easily noticed in this department. The other departments of the Show were much the same as last year. Taking it as a whole, the Show was considered very good, unless in the Ladies department. There has been a falling off in this department for the past two years. Your directors are of the opinion that the falling off in this department is partly owing to the defective state of the building, coupled with the low prizes offered for competition. Parties who may have valuable articles worthy to exhibit, will not in many cases bring them out to compete for fear of getting them damaged. In order to remedy this objection, your Directors beg to suggest for the consideration of members the desirability of agitating the amalgamation of the two Ridings into one; by so doing, union would give strength, and means would be more easily procured to build a good permanent Agricultural Hall on the Show grounds here, and by so doing our annual exhibitions would be worthy of the County. There ought not to be much objection raised to this suggestion, as the Show grounds are situated in the County town, being in the centre of the County, which would make it convenient for all to meet at a stationary and central place.

Your Directors would recommend the formation of Farmers' Clubs, for the purpose of discussing the best modes to be adopted in the cultivation of the soil generally. This may be objected to by some, on the ground that farmers are not sufficiently educated in the science of agriculture to discuss such questions, for want of agricultural teaching. It should be remembered that knowledge is power, and this will especially apply to us as farmers. Nothing would have a more direct influence and tendency to improve agriculture than a more general knowledge of the sciences that explain its principles and operations. Let us, therefore, arouse from our apathy.

Your Directors have pleasure in stating that the grounds are paid for, and the Society free from debt.

Barford.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		194 52	
" 124 Members' Subscriptions.....		124 00	
" Admissions to Show.....		71 37	
" Legislative Grant.....		76 00	
" To Miscellaneous Receipts.....		11 67	
		<hr/>	477 56
CR.			
By Prizes for Live Stock.....	225 50		
" " Field Products.....	47 50		
" " Dairy ".....	20 60		
" " Horticultural Products.....	7 50		
" " Agricultural Implements.....	21 00		
" " Arts and Manufactures.....	41 25		
		<hr/>	362 75
" Working Expenses.....		<hr/>	66 38
			<hr/>
			429 13
			<hr/>
Balance in hand.....			48 43

Brantford Horticultural Society.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		35 06	
" 144 Members' Subscriptions.....		144 00	
" Admissions to Show.....		118 43	
" Legislative Grant.....		140 00	
" Municipal Grant.....		25 00	
" Miscellaneous Receipts.....		28 00	
		<hr/>	490 49
CR.			
By Prizes for Fruits.....	91 00		
" " Flowers and Plants.....	80 00		
" " Vegetables.....	82 00		
		<hr/>	253 00
" Preparing for Exhibitions.....		<hr/>	86 18
" Working Expenses.....		<hr/>	149 90
			<hr/>
			489 08
			<hr/>
Balance in hand.....			1 41

REPORT.

The Directors of the Brantford Horticultural Society in presenting their third annual Report since their incorporation, are glad to observe, on the whole, a very marked improvement in the character of the articles entered for competition, and also an increase in the number of entries made by the various exhibitors, although in some respects the season this year was less favourable for the Society's exhibitions than in former years.

As usual, two Exhibitions have been held during the year, one on the 1st of July, the other on the 13th of September.

At the Spring Exhibition the show of fruits was rather meagre with the exception of cherries, of which the display was both excellent and varied. The season for strawberries, of which there had been a fine crop was quite over, and in consequence not a single entry of that fruit was made. At the Fall Exhibition, however, there was a magnificent display of fruits, such as the Directors confidently believe has never been excelled at any Exhibition in the County. Apples, pears and grapes were shown in very great numbers and of a superior quality.

The Directors observe with pleasure an increased attention given to the cultivation of the better varieties of the grape, by the amateur members of the Society.

In the Floral Department while the display of greenhouse plants was not equal to that of former years yet, as a whole, this department was far in advance of last year, to be principally attributed to the increasing attention of the amateur members.

The Directors do not observe any marked difference in the Vegetable Department from the Exhibition of last year, the display was quite equal in quantity and probably superior in quality to that of last year.

In financial matters the Society's affairs will be found in a satisfactory condition. Through the judicious thoughtfulness of Mr. Paterson, the Deputy Reeve for the Town, the County Council was induced to grant our Society \$25. This grant will no doubt be continued annually.

The Directors, in conjunction with the Volunteer Officers, early in the Spring undertook the task of procuring the Drill Shed to be lighted with gas, and succeeded therein at a total cost of \$141. To this fund the Society contributed \$28 on condition of having hereafter the free use of the shed by paying merely for the gas actually consumed, which will not cost five dollars annually.

The Directors finding the old tables both insufficient and ill adapted to the present wants of the Society procured a totally new set at a cost of about \$50. These tables are so constructed as to be arranged with trifling expense, ready for the reception of the articles for exhibition, while hitherto this work has cost the Society about \$16 annually.

By these means the Society's expenses will next year be lessened about \$50 and its income largely increased

* * * * *

BOTHWELL.

Dr.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			120	08		
" 297 Members' Subscriptions.....			297	00		
" Admissions to Show			31	57		
" Legislative Grant			700	00		
" Municipal Grant, County of Kent.....			95	00		
" " Township of Camden.....			25	00		
" Miscellaneous Receipts			20	00		
					1,288	65
<hr/>						
Cr.						
By Prizes for Live Stock	396	95				
" " Field Products.....	71	95				
" " Dairy "	9	00				
" " Horticultural Products	12	05				
" " Agricultural Implements.....	19	25				
" " Arts and Manufactures	121	75				
" " Ploughing Match.....	30	00				
					660	95
" L. G. to Township Societies			419	97		
" Preparing Show Grounds.....			33	94		

	\$	cts.	\$	cts.
" Discount on Silver	17	04		
" Working Expenses	137	75		
			1,269	65
Balance in hand			19	00

NOTE.—The Society is steadily increasing in members, and during the three years of its existence each successive Annual Exhibition has been an improvement on its predecessor, both in quantity and quality. Live stock is constantly improving, and the ploughing match was well attended, and much of the work done was superior. "In fruit we are not afraid to compete with any part of the Province."

Euphemia and Dawn

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			11	38		
" 106 Members' Subscriptions.....			109	00		
" Admissions to Show ...			18	38		
" Legislative Grant			95	45		
					234	21
CR.						
By Prizes for Live Stock.....	89	75				
" " Field Products.....	26	15				
" " Dairy	9	45				
" " Horticultural Products.....	9	20				
" " Agricultural Implements.....	4	25				
" " Arts and Manufactures	27	60				
			166	40		
" Preparing Show Grounds.....			17	55		
" Working Expenses			19	50		
					203	45
Balance in hand					30	76

REPORT.

Your Directors would beg leave to report that it is with feelings of the greatest pleasure as to the prosperity of this Society, they hand over their report of the past year. As regards our finances we must admit that they are low, but show a larger balance than the previous year. The year 1869 was commenced with a balance of \$92, and ended with a balance of \$11. The past year commenced with the last named balance, and closed with a balance of upwards of \$30. We do not claim that this is owing to any merit of our own, or to any former mismanagement, but entirely to an increase of interest felt in the Society by the members thereof.

In regard to the Annual Exhibition we are able to say it was a decided success, compared with former exhibitions, surpassing in quantity and quality any former show of this Society. The show of horses in nearly all the different sections was good. Cattle were not exhibited in great numbers, but were superior. Sheep and hogs were largely represented, and would compete favourably with any in the western section of the Province. The inside of the building was a credit to the county, and too much praise cannot be given to the department exhibited by the ladies connected with the Society, for the improvement in that branch contributed to by them.

Howard.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			149	70		
" 157 Members' Subscriptions			161	00		
" Legislative Grant			137	45		

	\$	cts.	\$	cts.	\$	cts.
To Municipal Grant			100	00		
“ Proceeds Sale of seeds			258	61		
“ Subscriptions for purchase of land.....			287	00		
“ Cash from C. Baker for the purchase of sheep.....			150	00		
CR.					1,243	76
By Prizes for Live Stock	108	25				
“ “ Field Products.....	25	75				
“ “ Dairy “	3	25				
“ “ Horticultural Products.....	11	50				
“ “ Agricultural Implements.....	15	50				
“ “ Arts and Manufactures	26	75				
“ “ Growing Crops.....	16	00				
“ “ Ploughing Match.....	22	00				
			229	00		
“ Amount paid on purchase of Exhibition ground			400	00		
“ Purchase of Seed.....			230	98		
“ Cash to C. Baker for the purchase of sheep			150	00		
“ Working Expenses			102	40		
					1,112	38
Balance in hand					131	38

NOTE.—The Annual Exhibition was fully up to previous years, notwithstanding the unfavourable weather. A suitable piece of ground at Ridgetown had been bought and paid for, aided by a Municipal grant, for holding the Exhibitions. It is recommended to discontinue, for a while, the Annual Ploughing Match, in the expectation that more interest will be felt in its objects after a temporary cessation. The desirableness of purchasing seed grain from different soils at a distance had engaged the attention of the Society, and the first experiment made in that direction had been attended with success, commercially, a small balance being left after defraying all expenses; and it is considered that, by following up this principle or a few years, a very beneficial influence will be imparted to the various kinds of crops.

	Zone.	\$	cts.	\$	cts.	\$	cts.
DR.							
To 111 Members' Subscriptions				132	30		
“ Admissions to Show.....				19	20		
“ Legislative Grant.....				108	81		
“ Miscellaneous Receipts.....				7	20		
CR.						267	51
By Prizes for Live Stock.....		127	55				
“ “ Field Products.....		25	80				
“ “ Dairy “		10	50				
“ “ Horticultural Products.....		14	40				
“ “ Agricultural Implements.....		4	25				
“ “ Arts and Manufactures.....		28	30				
				210	80		
“ Working Expenses.....				62	55		
						273	35
Balance due Treasurer.....						5	84

REPORT.

We have much pleasure in stating that, in our opinion, the Exhibition held the past year in Bothwell, by this Society, may be considered a success, and superior to that of any previous year.

The horses exhibited merited special attention, there being a large number of entries and good quality. Cattle were fair in number and kinds. Sheep were remarkably good, far superior to previous years. The number of hogs entered was quite as many as could have been expected; but the animals in this class far exceeded our expectations, and would do credit to any Agricultural organization. There was a good display of poultry. Corn, good. Grain and seeds generally were, upon the whole, good, considering the season having been so rainy and unfavourable. Roots were only medium, excepting potatoes, which were very extra in size and quality. The varieties of fruit were very good indeed, most kinds were largely represented, and the quality almost unsurpassable.

Dairy productions, in their several departments, were well represented; we believe the butter exhibited deserving of special notice, the whole of which was very good considering the number of competitors. There were also some very creditable productions in the class of ladies' work.

* * * *

BROCKVILLE.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		131 95	
“ 65 Members' Subscriptions.....		75 00	
“ Admissions to Show.....		22 25	
“ Legislative Grant.....		350 00	
		-----	579 20
CR.			
By Prizes for Live Stock.....	217 00		
“ “ Field Products.....	48 25		
“ “ Horticultural Products.....	39 85		
“ “ Arts and Manufactures.....	109 80		

	414 90		
Unpaid.....	110 86		
	-----	304 04	
“ Working Expenses.....		102 10	
		-----	406 14
Balance in hand.....			173 06

REPORT.

In laying before you for the present year their Annual Report, the Directors of this Society are enabled to state that the affairs of the Society are in a prosperous condition.

The Annual Exhibition for 1870 was also much in advance of 1869, particularly the show of horses, cattle and sheep. The articles shown in the Hall were also good of their kind. The show of grain was very good. The ladies' work especially contributed to the beauty of the display.

The dry season told against the show of roots, but there being some good specimens shown, proves that proper cultivation can overcome the ill effects of a dry season, to a certain degree.

The department of Arts and Manufactures was but poorly represented; your Directors would call the attention of manufacturers and others to the fact that this Society, although termed an Agricultural Society, was intended to foster every kind of industry.

The display of fruit was not good; that was also on account of the dry season. Under all considerations the Exhibition for 1870 may be considered a success.

* * * *

BRUCE, NORTH.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		167 94	
" 135 Members' Subscriptions.....		135 00	
" Admissions to Show.....		31 65	
" Legislative Grant.....		700 00	
" Elderslie Society for Fall Show.....		113 09	
" Balance from Saugeen Society.....		19 08	
" Miscellaneous Receipts.....		26 25	
		<hr/>	1193 01
Cr.			
By Prizes for Live Stock.....	214 50		
" " Field Products.....	62 00		
" " Dairy ".....	22 50		
" " Horticultural Products.....	15 50		
" " Agricultural Implements.....	38 75		
" " Arts and Manufactures.....	28 00		
" " Miscellaneous.....	5 75		
" " Reaping Match.....	24 00		
" " Ploughing Match (exclusive of donations).....	38 50		
	<hr/>		
	449 50		
Unpaid.....	8 25		
	<hr/>	441 25	
By Prizes of previous year.....		33 50	
" L. G. to Township Societies.....		401 73	
" Preparing Show Grounds.....		18 35	
" Grant to Port Elgin for expenses of fitting.....		35 00	
" " Elderslie Society for expenses of fitting.....		20 09	
" Saugeen Society, balance.....		23 33	
" Working Expenses.....		144 17	
		<hr/>	1117 42
Balance in hand.....			75 59

REPORT.

The year just closed, so far as your Society was concerned, was a successful one. It is therefore with a considerable degree of satisfaction that your Directors proceed to lay before you a brief report of the practical workings of this Society during 1870.

Although the farmers of North Bruce may not have realized as large a return for the labours of "seed, time and harvest" as many of them might have anticipated, yet it is gratifying to be able to state that they have, generally speaking, enough, and in many instances much, to spare of those things which constitute the requirements of the husbandman.

The summer season—being somewhat similar to that of 1869—moist and warm, caused the rapid growth of grain and root crops, both of which had a very promising appearance during the period of their growth.

Fall wheat, in this section, last year may be set down as an almost complete failure, the unusually long winter of 1869 and '70 had the effect of leaving many fields, which promised well in the fall, with very little appearance of a crop in spring.

While on this subject we may remark that in the opinion of the most experienced agriculturalists, too much attention has hitherto been paid in this County to the growth of wheat, and too little accordingly to the cultivation of other grains and root crops. For several years; in fact, since the settlement of the County, the growth of the former has been the great object of the farmer, while in many instances the latter have been almost entirely ignored. This system could not fail to have a damaging effect in different ways. The tillage of large areas of wheat, and especially (as has too often been the case) the repetition of the same crop

(wheat) year after year on the same soil, has, of course tended to deteriorate the soil and to lessen the yield per acre of the crop, as well as to produce an inferior quality of grain; while the same practice has proved eminently successful in nourishing, spreading and bringing to perfection those pests of the wheat field, which in former years succeeded so well in driving this grain almost entirely from the older settlements.

We are pleased to be able to state, however, that a change from the system referred to is gradually taking place. Taught by experience our more enterprising farmers are directing their efforts into another and a different channel, and while their less energetic and more careless neighbours rely upon the quantity of wheat they can produce for the market, (which quantity under the circumstances too often falls short of their requirements), they are turning their attention to the cultivation of root crops and the feeding of stock, thereby realizing a better return for their labour; being able at most any time to turn their surplus stock into cash. We have had sufficient evidence of this during the year just closed. Cattle, sheep and hogs were in good demand, and brought high prices; and the large numbers especially of sheep and cattle, purchased in, and driven from, the County, during the past year, is a proof that the raising and feeding of such animals for the market is taking an important place among the duties of the farming community.

* * * * *

The Exhibitions held by the Society during the past year proved very successful, and could not fail to be beneficial in securing the end in view.

The Spring Show was held at Stark's Corners on the 20th of April. Fourteen stallions and five bulls (four of them pure bred) were exhibited; and the quality of these animals was an evidence of the growing inclination of our farmers to become possessed of better breeds of horses and cattle, &c. \$64 in premiums, were awarded at this Exhibition.

Your directors held the Fall Exhibition of the Society at Paisley, on the 7th October. This proved in many respects the most successful Exhibition held by the Society since its formation. The entries were more numerous than those of any previous year, while the favourable state of the weather, combined with the usual attractions of an Agricultural Exhibition, had the effect of bringing together a larger body of people than was, perhaps, ever before seen in the County. Very many therefore who take no interest in the maintenance of the Society enjoyed the privilege of viewing the samples placed on exhibition by their more enterprising neighbours, and might reason therefrom, that they too should be members, and be prepared to compete in some department ere another year pass away.

The live stock exhibited was on the whole superior to that of former years. The horses were generally superior animals—only a few thorough bred cattle were exhibited—but many fine animals appeared in the grade class. The entries of sheep were not so numerous as at previous exhibitions. The swine and poultry classes were well represented.

In grain, roots, fruits, dairy produce, domestic manufactures, implements, &c., the samples were numerous, and would compare favourably with similar articles exhibited in older counties.

Your directors held a match for the trial of reaping machines, near Paisley, on the 28th July. This match we intended for the purpose of giving the members of the Society and farmers in general, an opportunity of seeing the different machines (the sale of which had been urged by agents and manufacturers in the County) thoroughly tested. Six machines were entered for the contest, and it is satisfactory to be able to state that the machine which, after a fair trial, was awarded the palm, had been manufactured in the North Riding of Bruce.

The Society's ploughing match took place on the 20th October, and was a great success. The liberality of some of our mechanics, in placing at our disposal articles to the value of \$70 enabled us to offer unusually attractive premiums. Men and boys entered the contest with a spirit and determination worthy of their class, and although all could not win, yet the work of every competitor was worthy of the highest commendation; and it is a noteworthy circumstance that many of our young men bid fair to rival our champion ploughmen in the execution of this most important branch of farming operations.

Your directors have pleasure in testifying to the success of the Society in all its operations during the past year. A deeper interest in the Society and a more general support from all classes would, however, enable the North Riding of Bruce to realize more fully in all their bearings, the beneficial effects of our Agricultural Society. The Society is doing a good

work, and every credit is due to those members, who, without looking for a direct return of their money have given the Society an unwavering support since its organization.

* * * * *

We hesitate not to deprecate in the strongest terms the principle which prompts a man, to pay a dollar into the funds of the Society only when he expects to draw a larger sum out. Such a principle is altogether at variance with the advantageous working of an Agricultural Society, and assuredly the liberality of our Legislature in giving us an annual grant of \$700 was never intended for the mere purpose of paying men for their trouble in competing at our Exhibitions. Shallow minded ; selfish, indeed, must that man be who cannot take a higher and a nobler view of the matter ; whose thoughts are all concentrated on the question of dollars and cents, who cannot believe that in contributing towards the support of an Agricultural Society, he is promoting our agricultural, commercial and manufacturing interests and thereby increasing the success of his own calling, if he has a lawful one.

* * * * *

On the whole we can congratulate the members on the standing and general prosperity of the Society. In newly settled Counties like this many improvements may be noticed in the space of twelve months. We can now only refer to this as a new County, in point of time. We have gained ground so rapidly on our neighbours in what we speak of as the old settlements, that we can stand side by side with them in many particulars. Our leading roads are much better than many of those of the older settled Counties ; our farms are gradually becoming cleared of all that remained to show where the forest once stood, so that during the past season the REAPER entered largely into our harvesting operations ; our villages are growing into towns—our manufacturing interests are progressing rapidly. We provide most of our own agricultural implements, from the mower and reaper down to the hand-rake. And what is best, our implement manufacturers rank among the best in the Province. We can afford to export large quantities of farm produce of almost every description ; so that taking everything into consideration, we may safely conclude that this County, with the full development of its rich agricultural resources and immense manufacturing privileges, aided by Railway facilities, long looked for, is destined to rank among the most important Counties in the Dominion.

Before concluding this Report we desire to refer to another subject of great importance. We allude to the necessity of giving every encouragement to the sound, practical education of the rising youth of our County. Education is just as necessary to the successful carrying on of farming operations as it is in any other pursuit. It is a mistaken idea that because a young man is to become a farmer he has no need of learning. Farming has, in every age, been considered a noble and an honourable calling—men of the highest stamp of intellect, who by patient industry and perseverance have attained to the highest positions of honour and trust in this as well as in other countries, have not been ashamed to acknowledge that they are or had once been farmers. How often do we see men of intelligence, well versed in the art of husbandry, growing wealthy on farms where less intelligent individuals could scarcely derive subsistence. See to it then, farmers of North Bruce ! that you be not behind in the education of your children. Teach your young men to regard labour in the field as being as honourable as that at the desk or behind the counter ; teach them that a suit of grey, manufactured in the family, can cover as respectable a man—a man just as useful to society and possessed of as noble a mind, securing him the esteem of his fellow men, as the man clad in *brown-cloth*. Give them, if possible, an opportunity of becoming acquainted with the science of agriculture in all its details, so that when they enter upon the duties of husbandmen they may do so with an ease and intelligence that will enable them to succeed. Cultivate the minds of your young women more than the adorning of their persons. Teach them to be useful in whatever position in life they may happen to be placed. Let them be taught to sew and knit, to wash and bake, in preference to performances on the piano, or the accomplishments of the ball room.

Provide the young of both sexes with useful and entertaining reading matter. A niggardliness in this respect leaves many families to grow up in comparative ignorance.

Let us all endeavour to act a good part in encouraging the proper education of the rising generation, and we may safely indulge the hope that many of our young men will “ tower to eminence in agricultural pursuits, as well as in the many other callings open to them ; and that with the increasing intelligence of all classes of the community, all our interests may be more faithfully guarded, and every man among us may be influenced to look beyond self, and take a pride in seeing our country become more and more conspicuous in all that constitutes

a nation's greatness, and in everything that contributes to the well-being of a free and enlightened people.

	*	*	*	*	*	*
	Arran.					
Dr.				\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....					55 89	
“ 111 Members’ Subscriptions.....					111 00	
“ Admissions to Show.....					6 00	
“ Legislative Grant.....					136 34	
“ Municipal Grant.....					30 00	
“ Miscellaneous Receipts.....					13 40	
						352 63
Cr.						
By Prizes for Live Stock.....				66 75		
“ “ Field Products.....				32 97		
“ “ Dairy “.....				15 50		
“ “ Horticultural Products.....				7 03		
“ “ Agricultural Implements.....				22 50		
“ “ Arts and Manufactures.....				25 50		
“ “ Ploughing Match.....				49 25		
					219 50	
“ Purchase of Seed.....					25 00	
“ Working Expenses.....					55 17	
						299 67
Balance in hand.....						52 96

REPORT.

* * * * *

Our Society held a Fall Show—the most successful that it has ever had, and also a Ploughing Match. Twenty-three bushels of Surprise oats were purchased last spring and distributed among the members, but they have not given satisfaction, the yield being no better than the common oats in use, nor as good as the Black Mane oats. If they are not cut before ripe they fall to the ground, the branches or tendrils on which the oats grow being long they intersect, and the oats are pulled off in cutting and are lost.

Our spring grains, excepting wheat, have been an average crop. Roots were good, more especially potatoes, which were an extra crop. The midge has affected the wheat crop for two seasons, requiring spring wheat to be sown late in the season to escape its ravages, but it did not made much improvement in the yield this season. The fall wheat was badly winter-killed by the great depth of snow, but on the high lands some escaped, yielding an extra sample of grain. In this section the Treadwell stood the winter the best, while the Deihl, Soules and Michigan Amber were almost entirely killed out. Hay was not an average crop, owing to the great drouth in the growing season.

Our Stock is also making rapid improvement. The horses compete favourably with the best in the division. In cattle there is a decided step to advancement ; there are two thorough-bred short horn bulls in the township which took first and second prizes at the Electoral Division Spring Show. Other stock is improving in the same way as fast as means will allow. There are first-class animals brought in for the public service.

	Bruce.					
Dr.				\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....					77 55	
“ 57 Members’ Subscriptions.....					60 00	
“ Legislative Grant.....					63 30	
						200 85

Cr.						
By Prizes for Live Stock.....				70 00		

	\$	cts.	\$	cts.	\$	cts.
By Prizes for Field Products	20	00				
“ “ Dairy “	5	75				
“ “ Horticultural Products.....	1	25				
“ “ Agricultural Implements.....	9	25				
“ “ Arts and Manufactures.....	11	75				
	118	00				
Unpaid.....	16	25				
			101	75		
“ Prizes of previous year.....			17	00		
“ Preparing Show Grounds.....			10	00		
“ Working Expenses.....			16	97		
					145	72
Balance in hand.....					55	13

Elderslie.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			83	56		
“ 51 Members' Subscriptions.....			51	00		
“ Admissions to Show.....			5	25		
“ Legislative Grant.....			62	09		
“ Grant from North Riding Society.....			20	00		
					221	90
CR.						
Unpaid Prizes of previous year; amount of Members' Subscriptions, Legislative Grant, paid to County Society for Union Exhibition, Working Expenses, &c.....					215	84
Balance in hand.....					6	06

NOTE:—This Society united with that of the Electoral Division for exhibition purposes.

Saugeen.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			23	33		
“ 129 Members' Subscriptions.....			129	00		
“ Admissions to Show.....			9	13		
“ Legislative Grant.....			140	00		
“ Donations and Entries for Ploughing Match			20	50		
					321	96
CR.						
By Prizes for Live Stock.....	102	25				
“ “ Field Products.....	31	90				
“ “ Dairy “	15	00				
“ “ Horticultural Products.....	5	75				
“ “ Agricultural Implements.....	9	50				
“ “ Arts and Manufactures.....	22	75				
“ “ Ploughing Match.....	24	00				
			211	15		
“ Preparing Show Grounds.....			40	00		
“ Working Expenses.....			48	85		
					300	00
Balance in hand.....					21	96

BRUCE, SOUTH.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		73 58	
" Members' Subscriptions.....		145 50	
" Admissions to Show.....		75 00	
" Legislative Grant.....		700 00	
" Special Prizes for Fall Show.....		63 00	
" " " Ploughing Match.....		61 50	
" " " Fat Cattle Show.....		10 75	
" Brant Township Society.....		60 44	
		<hr/>	1189 77
CR.			
By Prizes for Live Stock.....	257 00		
" " Field Products.....	60 75		
" " Dairy ".....	17 00		
" " Horticultural Products.....	30 50		
" " Agricultural Implements.....	32 75		
" " Arts and Manufactures.....	25 00		
" " Fat Stock Show.....	15 75		
" " Ploughing Match.....	76 00		
		<hr/>	514 75
" " for previous year.....		2 00	
" L. G. to Township Societies.....		418 85	
" Preparing Show Grounds.....		81 16	
" Working Expenses.....		158 25	
		<hr/>	1175 0
Balance in hand.....			14 76

REPORT.

The Directors congratulate the Riding on the improvement which has taken place in the breeds of horses, cattle and swine, and on the introduction and manufacture of first-class agricultural implements.

* * * * *

They recommend that the Fall Show should be held for two days, as one day does not give sufficient time for the work of the Exhibition.

At the ploughing match \$76 were taken in prizes all by residents of the County, and the ploughs used were chiefly manufactured in the County. The work done was first-class.

At the fat cattle show \$15, mostly subscriptions, were given as prizes. Some very fine animals were on the ground.

The directors are thankful for the countenance they have received, but think the people of the Riding might increase the influence and usefulness of the Society by a more general and generous support.

* * * * *

The Township Societies are reported in a flourishing condition; but two or more Townships are recommended to unite their shows to increase efficiency and to save time and expense.

The County Council are urged to take steps to secure a portion of the emigrants to this County, where they can find plenty of employment.

Salt is recommended as a manure, say 200 lbs. to the acre, and is said to ripen wheat a few days earlier. The County is found well adapted for the cultivation of all the coarse grains and fruits. The course of continual wheat cropping had a tendency to permanently injure the land, the failure of that crop may therefore prove an ultimate benefit.

Our soil being well adapted for all the grasses, the farmers are recommended to improve their breeds of cattle and devote more of their energies to the fattening of stock, and as pure breeds are too expensive for the ordinary farmer, grades which can be raised at small expense make good substitutes, the cross between native cattle and Durham being the best.

In sheep, Leicesters and Cotswolds are deemed the most preferable. Of pigs, the Yorkshire attains the greatest weight, Berkshire and Essex breeds mature earliest and fatten quickest, but are objected to sometimes on account of colour. Your directors think the good qualities of all will be found in the Suffolk breed.

Brant.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		81 75	
" 59 Members' Subscriptions.....		59 00	
" Legislative Grant.....		36 29	
" Subscriptions for fencing Show Ground.....		46 00	
" Do. from South Riding Society for Show Ground		25 00	
			248 04

Cr.	\$ cts.	\$ cts.	\$ cts.
By For Exhibition Building, Fencing, &c.,.....	173 10		
" Paid County Society Treasurer.....	60 44		
" Working Expenses.....	14 50		
			248 04

Carrick.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		4 12	
" 126 Members' Subscriptions.....	145 00		
" Admissions to Show.....	5 40		
" Legislative Grant.....	83 68		
" Municipal Grant.....	20 00		
" Miscellaneous Receipts.....	6 50		
			264 70

Cr.	\$ cts.	\$ cts.	\$ cts.
By Prizes for Live Stock.....	97 50		
" " Field Products.....	30 75		
" " Dairy ".....	6 75		
" " Horticultural Products.....	18 50		
" " Agricultural Implements.....	11 00		
" " Arts and Manufactures.....	11 75		
	176 25		
" " Unpaid.....	11 50		
		164 75	
" Prizes of Previous year.....	4 00		
" Preparing Show Grounds.....	8 25		
" Working Expenses.....	30 75		
			207 75
Balance in hand.....			56 95

Culross.

Dr.	\$ cts.	\$ cts.	\$ cts.
To 71 Members' Subscriptions.....		71 00	
" Admissions to Show.....		4 00	
" Legislative Grant.....		46 64	
" Miscellaneous Receipts.....		6 16	
			127 80

Cr.	\$ cts.	\$ cts.	\$ cts.
By Prizes for Live Stock.....	70 00		
" " Field Products.....	10 35		
" " Dairy ".....	7 50		
" " Horticultural Products.....	5 25		
" " Agricultural Implements.....	9 50		

	\$	cts.	\$	cts.	\$	cts.
By Prizes for Arts and Manufactures.....	9	62				
" Preparing Show Grounds.....			112	22		
" Working Expenses			2	00		
			13	58		
					127	80

Greenock.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			7	50		
" 64 Members' Subscriptions.....			64	00		
" Legislative Grant			42	45		
					113	95

CR.						
By Prizes for Live Stock.....	48	40				
" " Field Products	19	80				
" " Dairy "	5	00				
" " Horticultural Products.....	5	60				
" " Agricultural Implements.....	2	75				
" " Arts and Manufactures.....	13	60				
			95	15		
" Working Expenses			16	85		
					112	00
Balance in hand.....					1	95

Huron.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			4	76		
" Members' Subscriptions			132	00		
" Legislative Grant			79	77		
" Proceeds of Sale of Seeds			169	09		
" Proceeds Sale of Live Stock			102	00		
" Ploughing Match			119	25		
" Miscellaneous Receipts			20	32		
					627	19

CR.						
By Prizes for Live Stock.....	68	25				
" " Field Products	23	75				
" " Dairy "	6	50				
" " Horticultural Products.....	12	25				
" " Agricultural Implements	12	50				
" " Arts and Manufactures.....	12	50				
" " Ploughing Match	105	25				
			241	00		
" Purchase of Seed			202	66		
" Purchase of Live Stock			83	67		
" Working Expenses			53	25		
					580	58
Balance in hand.....					46	61

REPORT.

We have much pleasure in submitting our Annual Report. The number of entries was not as large as formerly, the Show day being very wet and disagreeable.

The horse department of the exhibition was well represented, the horses appearing in good condition generally, and some of them well matched in colour and speed. The show of horned cattle was not so good as formerly. Sheep and swine rather meagre in quantity, but

the quality was very good. The grain and root departments were well represented, both in variety and quality. The ladies did much to make the exhibition attractive in the number of articles shown.

Kincardine.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		25 32	
“ 66 Members’ Subscriptions.....		66 00	
“ Legislative Grant		40 56	
“ Proceeds Sale of Seeds		145 05	
		<u>276 93</u>	
CR.			
By Prizes for Live Stock.....	47 50		
“ “ Field Products.....	11 25		
“ “ Dairy “	4 50		
“ “ Horticultural Products	6 50		
“ “ Agricultural Implements.....	7 50		
“ “ Arts and Manufactures	8 75		
		<u>86 00</u>	
“ Prizes of previous year		10 25	
“ Purchase of Seed		145 05	
“ Working Expenses		26 08	
		<u>267 38</u>	
Balance in hand			9 55

Kinloss.

DR.	\$ cts.	\$ cts.	\$ cts.
To 135 Members’ Subscriptions		135 00	
“ Admissions to Show		34 50	
“ Legislative Grant		89 58	
		<u>259 08</u>	
CR.			
By Balance due Treasurer		49 50	
“ Prizes for Live Stock.....	63 50		
“ “ Field Products.....	19 25		
“ “ Dairy “	8 50		
“ “ Horticultural Products	8 75		
“ “ Agricultural Implements.....	12 00		
“ “ Arts and Manufactures	17 25		
“ “ Spring Show of Stock.....	7 00		
“ “ Ploughing Match (2 silver medals).....	14 00		
	<u>150 25</u>		
“ “ Unpaid	63 50		
		<u>86 75</u>	
“ Preparing Show Grounds.....		40 95	
“ Working Expenses.....		50 00	
		<u>227 20</u>	
Balance in hand			31 88

CARDWELL.

DR.	\$ cts.	\$ cts.	\$ cts.
To Members’ Subscriptions		204 25	
“ Admissions to Show		76 00	

	\$	cts.	\$	cts.	\$	cts.
To Legislative Grant.....	700	00				
“ Miscellaneous Receipts	85	00				
					1,065	25
CR.						
By Prizes for Live Stock.....	212	50				
“ “ Field Products	98	75				
“ “ Agricultural Implements.....	91	00				
“ “ Arts and Manufactures	94	25				
	496	50				
“ “ Unpaid	204	80				
			291	70		
“ L. G. to Township Societies.....			400	96		
“ Preparing Show Grounds			291	92		
“ Working Expenses.....			65	03		
					1,049	61
Balance in hand					15	64

Adjala.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand.....	111	90				
“ 125 Members' Subscriptions.. ..	125	00				
“ Legislative Grant	140	00				
“ Proceeds of Floral Hall.....	24	77				
					401	67
CR.						
By Prizes for Live Stock.....	147	50				
“ “ Field Products	57	00				
“ “ Dairy “	9	50				
“ “ Horticultural Products	10	50				
“ “ Agricultural Implements.....	20	00				
“ “ Arts and Manufactures	6	00				
	250	50				
“ “ Unpaid.....	105	00				
			145	50		
“ Prizes of previous year.....			36	50		
“ Preparing Show Grounds.....			5	00		
“ Working Expenses			60	92		
					247	92
Balance in hand.....					153	75

REPORT.

In presenting you their Annual Report and Financial Statement for the year 1870, your directors feel it their duty to take a brief review of the past year in connection with our Association. In doing so, your directors beg to report that, owing to many favourable circumstances, they were enabled last year to offer three hundred dollars in prizes.

* * * * *

Your directors scarcely think it necessary to advert at length to the causes that led to this unwonted prosperity, but they deem a short explanation to be in order and well-timed. Our last audit showed a very respectable balance in hand; your directors, though they say it themselves, went to work with energy and added many names to the list of members. The Government grant was large in proportion to the money sent; so that everything was in our

favour. The prizes your directors were thus able to offer gave a fresh impetus to competition, so much so, that our Exhibition for 1870 was in point of quantity and quality immeasurably better than any of its predecessors. This gratifying result was not due alone to the large prizelist but to the enlargement of the boundaries of the Association, or rather to the complete removal of any limit. This your directors deemed desirable, and the happy results have shown the correctness of their views.

* * * * *

Suffice it to say, that there was no comparison in any one class between the past year and any of the previous ones. But while there was a marked improvement in all the classes, horned cattle, sheep, pigs, and so forth, in no other class was the Exhibition so truly gratifying as in that of the horses. There were four entries made for one of any of the preceding years, and a still greater difference was noticeable in the quality. The show of young horses was not inferior to that of any fair in Simcoe or Cardwell, be it Township or County.

* * * * *

Albion.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		95 10	
" 83 Members' Subscriptions.....		83 00	
" Admissions to Show.....		57 10	
" Legislative Grant.....		60 48	
" Municipal Grants.....		62 75	
" Special Prizes.....		111 60	
		<u>470 03</u>	

CR.

By Prizes for Live Stock.....	147 00		
" " Field Products.....	23 00		
" " Dairy "	12 25		
" " Horticultural Products.....	20 00		
" " Agricultural Implements.....	37 00		
" " Arts and Manufactures ..	49 00		
	<u>288 25</u>		
" " Unpaid	25 25		
		<u>263 00</u>	
" Prizes of previous year.....		37 00	
" Preparing Show Grounds.....		10 90	
" Working Expenses.....		34 46	
		<u>345 36</u>	
Balance in hand.....			<u>124 67</u>

Caledon.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....	93 43		
" 213 Members' Subscriptions	213 00		
" Admissions to Show.....	235 45		
" Legislative Grant	140 00		
" Municipal Grants.....	118 25		
	<u>799 13</u>		
CR.			
By Prizes for Live Stock.....	146 00		
" " Field Products.....	57 75		
" " Dairy "	25 50		
" " Horticultural Products.....	8 00		
" Agricultural Implements.....	15 50		

	\$	cts.	\$	cts.	\$	cts.
By Prizes for Arts and Manufactures.....	89	00				
	341	75				
“ “ Unpaid.....	29	00				
			312	75		
“ “ Preparing Show Grounds			10	00		
“ Buildings, Insurance, &c.....			117	00		
“ Working Expenses			125	39		
					565	14
Balance in hand					233	99

Mono.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			22	12		
“ 65 Members' Subscriptions.....			65	00		
“ Admissions to Show.....			133	15		
“ Legislative Grant			60	48		
					280	75
CR.						
By Prizes for Live Stock.....	125	25				
“ “ Field Products	44	50				
“ “ Dairy “	10	75				
“ “ Horticultural Products.....	6	00				
“ “ Agricultural Implements	37	25				
“ “ Arts and Manufactures.....	42	25				
“ Prize for Band	25	00				
			291	00		
“ Working Expenses.....			40	25		
					331	25
Balance in hand.....					49	50

CARLETON.

DR.	\$	cts.	\$	cts.	\$	cts.
To Members' Subscriptions			211	00		
“ Legislative Grant			700	00		
“ Part Proceeds of Insurance Policy.....			390	68		
					1301	68
CR.						
By Balance due Treasurer			181	90		
“ Growing Crops.....			109	00		
“ L. G. to Township Societies.....			389	30		
“ Agricultural Publications.....			33	60		
“ Working Expenses			79	25		
					793	05
Balance in hand.....					508	63

REPORT.

The annual meeting of the members of this Society took place at the Town Hall, in Nepean.

From the presence of so many of the leading members of the Society, it will be seen

that considerable interest was manifested in the proceedings, the action of the meeting being looked upon as either fatal to the existence of the Society or as pointing to its continued prosperity, notwithstanding the unfortunate circumstances of the year. By the great fires of August last the Society lost all—buildings, sheds, fences, ropes and everything which had been required for the complete management of its annually recurring exhibition. Fortunately, however, a partial insurance had been effected on the property, and with active management and the continued liberality of the public, as already evinced, all promises well for the future success of the Society.

The great want of rain from early spring, and the severe drought that necessarily followed, proved most injurious, with but few exceptions, to the principal crops grown in your County. A like occurrence may, however, in future, be to a great extent avoided by a better preparation of the soil, thorough drainage, and more careful and improved cultivation. Your Directors would call attention to a report of the Committee appointed by the Agricultural and Arts Association, for the purpose of enquiring into the irregular voting at their annual meeting, by which it will be seen how the city of Kingston has been selected for the next Provincial Exhibition, in place of Ottawa. This investigation was held at the instance of the Hon. Jas. Skead, the representative of Agricultural Division No. 2, of which your Society forms a part, and through whose energy and perseverance many irregularities (the avoidance of which is of vital importance to the interest of the Association and its connections) have been brought to light.

With reference to the Township Societies as connected with your Society, we beg to report that the Townships of March and Fitzroy have each held their annual exhibitions, and notwithstanding the unfavourable occurrences of the year, have apparently maintained their former state of efficiency.

As regards the present and future prospects of your Society, it will hardly be deemed necessary to recite the causes which forbade your directors attempting the holding of an Exhibition during the past year. The extremely unfavourable season, owing to the drought and the destructive burnings which swept the better part of your County, need only be here mentioned to offer a sufficient reason. The buildings and fences on the Society's grounds having been entirely consumed, it will become the duty of our successors to set about rebuilding at an early date, and we would strongly recommend that a more suitable site should be chosen—one better adapted to the requirements of the Society. With reasonable economy it is believed that sufficient funds will be found available, at the proper time to meet the expenditure connected with the building and carrying out the improvements necessary for an Exhibition ground.

In conclusion, your directors would strongly urge upon the farmers and others interested in the future progress and welfare of our County, the necessity of greater interest being taken in agricultural matters, and the support and maintenance of well regulated Agricultural Societies.

CORNWALL.

Dr.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			110	53		
“ Members’ Subscriptions.....			129	92		
“ Legislative Grant.....			350	00		
					590	45
CR.						
By Prizes for Live Stock.....	82	25				
“ “ Field Products.....	56	50				
“ “ Dairy “.....	12	00				
“ “ Horticultural Products.....	20	25				
“ “ Agricultural Implements.....	14	00				
“ “ Arts and Manufactures.....	26	25				
			211	25		
“ Preparing Show Grounds.....			34	18		
“ Keep of Live Stock.....			73	00		

	\$	cts.	\$	cts.	\$	cts.
By Working Expenses.....			131	68		
					450	11
Balance in hand.....					140	34

NOTE:—The Report speaks in an encouraging manner of the state and prospects of the Society. Deep regret is expressed at the destruction by fire, of the Cornwall Manufacturing Company, involving a loss of some \$300,000, and throwing a large number of people out of employment. The destruction caused by high water and floating ice in the St. Lawrence at Moulinette, occasioning the loss of Mr. Robinson's mills, and heavy damage to other mills, and to works in course of construction, is a disaster likewise calling for sympathy. Notwithstanding these heavy disasters, the year, on the whole, is spoken of as having been favourable to the farming interests.

DUNDAS.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			133	60		
" 390 Members' Subscriptions.....			390	50		
" Admissions to Show.....			295	21		
" Legislative Grant.....			700	00		
" Miscellaneous Receipts.....			140	00		
					1659	31

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock.....	275	11				
" " Field Products.....	50	03				
" " Dairy ".....	15	86				
" " Horticultural Products.....	27	04				
" " Agricultural Implements.....	40	95				
" " Arts and Manufactures.....	46	00				
			454	99		
" L. G. to Township Societies.....			356	00		
" Preparing Show Grounds.....			138	03		
" Former Liabilities.....			105	12		
" Working Expenses.....			210	48		
					1264	62
Balance in hand.....					394	69

NOTE:—The Directors remark in their Report that the financial condition of the Society has very much improved, and considering the severe drought, the Exhibition exceeded expectations. On the whole there was a marked improvement in Live Stock, Dairy Produce, Implements, &c., as compared with only a very few years ago.

Matilda.

NOTE:—This Society being unable to obtain a sufficient amount of paid up subscriptions held no Show in 1870. After paying old premiums and discharging other obligations, the Treasurer had a balance in hand of \$2.04. The Secretary states that "the prospects of Society for 1871 are very promising."

Mountain.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			36	00		
" 66 Members' Subscriptions.....			66	00		
" Legislative Grant.....			76	00		
					178	00

Cr.	\$ cts.	\$ cts.	\$ cts.
By Prizes for Live Stock.....	72 00		
" " Field Products.....	21 00		
" " Dairy ".....	5 00		
" " Horticultural Products.....	12 00		
" " Agricultural Implements.....	13 00		
" " Arts and Manufactures.....	10 00		
	-----	133 00	
" Working Expenses.....		28 00	
		-----	161 00
Balance in hand.....			17 00

Williamsburgh.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		28 96	
" 156 Members' Subscriptions.....		157 00	
" Legislative Grant.....		140 00	
		-----	325 96
Cr.			
By Prizes for Live Stock.....	123 45		
" " Field Products.....	38 85		
" " Dairy ".....	5 50		
" " Agricultural Implements.....	29 80		
" " Arts and Manufactures.....	39 45		
" " Mowing Match.....	10 00		
" " Ploughing Match.....	23 50		
	-----	270 55	
" Preparing Show Grounds.....		38 33	
" Purchase of Seed.....		15 75	
" Working Expenses.....		4 13	
		-----	328 76
Balance due Treasurer.....			2 80

Winchester.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		108 33	
" Members' Subscription.....		114 00	
" Legislative Grant.....		140 00	
" Balance from County Society.....		68 00	
" Miscellaneous Receipts.....		12 00	
		-----	442 33
Cr.			
By Prizes for Live Stock.....	173 00		
" " Field Products.....	13 75		
" " Dairy ".....	7 25		
" " Horticultural Products.....	1 50		
" " Agricultural Implements.....	24 25		
" " Arts and Manufactures.....	11 00		
" " Ploughing Match.....	20 00		
	-----	250 75	
" Prizes of previous year.....		19 75	
" Purchase of Live Stock.....		100 00	
" Discount on Silver.....		7 50	
" Working Expenses.....		57 68	
		-----	435 68
Balance in hand.....			6 65

REPORT.

The Directors in presenting their annual Report desire to thank the friends and patrons of the Society for their continued support. The past year has been successful and the Society's Exhibition gave evidence of renewed interest in agricultural pursuits. While the season has been unfavourable to many districts, the labours of the husbandman in this Township have been crowned by an ample harvest.

The several departments represented at the Exhibition were well filled. The samples of produce were good, while the show of stock leads the van in Central Canada.

Your Directors deemed it necessary for the interest of the Society to purchase more stock and procured two thoroughbred Ayrshire Bulls, which we trust will give satisfaction.

The Ladies Department, so necessary and of such interest, was an index of the industry and taste of the ladies of Winchester.

* * * * *

While we hold the proud position of being a community in this enterprising Dominion, and possess the elements of wealth and rich resources, this Society, with united effort, will work out for the common interest of our Township, encouraging and nurturing every branch of industry, which tends to raise the standard of the agriculturists in the County. This can only be accomplished by every member of the Society performing his duty with energy and purpose.

DURHAM, EAST.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		69 13	
" 57 Members' Subscriptions.....		57 00	
" Admissions to Show.....		122 00	
" Legislative Grant.....		700 00	
" Appropriation of Cavan Society.....		158 51	
		<hr/>	1106 64
CR.			
By Prizes for Live Stock.....	287 25		
" " Field Products.....	43 00		
" " Dairy ".....	20 00		
" " Horticultural Products.....	37 00		
" " Agricultural Implements.....	30 00		
" " Arts and Manufactures.....	122 75		
	<hr/>	540 00	
" L. G. to Township Societies.....		420 00	
" Working Expenses.....		122 22	
		<hr/>	1082 22
Balance in hand.....			24 42

REPORT.

The Directors, in presenting their Report, desire to thank the friends and patrons of the Society for their assistance and support in carrying out the aims and objects of the Society ; and although they feel that there is nothing very special to report in its operations for the past year, yet there are evident signs of progress in the quality of the stock, and in agricultural operations in general.

A few years ago improved stock was in the hands of a few individuals, but now animals of fair quality are to be found all through the neighbourhood, especially sheep and pigs.

Great improvement is taking place in Agricultural Implements and Machines. Necessity is the mother of invention ; the scarcity of labourers and the high price of labour has led to this. A great change has taken place in the last few years in the system of cropping ; wheat growing is giving place to green crops and barley, and to the production of beef and mutton, which find a good market in our cities and towns, and across the lines. This has been

brought about partly from necessity; the exhausted state of the land, and the difficulty of obtaining artificial manures of good quality, and also the advanced price of butchers' meat have led to this change of system.

The grain crop of the past year was very light and unremunerative, but this has in some measure been made up by the high price of stock and dairy produce.

Farmers are becoming very anxious in the matter of manures, and we would suggest that the Bureau of Agriculture should adopt some means to prevent the sale of spurious articles, called manures, by which the agricultural community have been deceived in time past.

The Exhibition of your Society was held at Millbrook, in connection with the Township of Cavan Agricultural Society, and it must have been very gratifying to the promoters of this Union Exhibition to witness the interest manifested by the people throughout the Riding. The Show was quite a success both in quantity and quality, and in new varieties of stock and articles exhibited.

Agricultural periodicals have been freely circulated through the Township Societies; and we are pleased to find that, although an Horticultural Society has been organized in Port Hope, the people of the town have not withdrawn their patronage from Agricultural Societies, but continue to subscribe quite as liberally as formerly, and in fact more so, and that the very best spirit prevails, the respective Societies feeling that they have a great and noble work to do.

Cavan.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		75 05	
“ 166 Members' Subscriptions.....		166 00	
“ Admissions to Show.....		7 00	
“ Legislative Grant.....		172 42	
		<hr/>	420 47
CR.			
By Prizes for Live Stock Spring Show.....		24 00	
“ “ County Society for Union Exhibition.....		158 51	
“ Port Hope Horticultural Society.....		33 82	
“ Agricultural Publications.....		94 03	
“ Working Expenses.....		35 06	
		<hr/>	345 42
Balance in hand.....			75 05

NOTE:—This Society united with that of the Electoral Division for the purpose of a Fall Show.

Hope.

DR.	\$ cts.	\$ cts.	\$ cts.
To 149 Members' Subscriptions.....		149 00	
“ Admissions to Show.....		156 42	
“ Legislative Grant... ..		123 48	
		<hr/>	428 90
CR.			
By Prizes for Live Stock.....	150 00		
“ “ Field Products.....	21 25		
“ “ Dairy “	11 75		
“ “ Horticultural Products.....	27 50		
“ “ Agricultural Implements.....	12 00		
“ “ Arts and Manufactures.....	73 75		
	<hr/>		
	296 25		
Unpaid.....	88 57		
	<hr/>		
		207 68	
“ Preparing Show Grounds.....		84 45	

	\$	cts.	\$	cts.	\$	cts.
By Agricultural Publications.....			92	50		
“ Working Expenses.....			43	64		
					428	27

Balance in hand..... 0 63

NOTE:—The Society, which has existed for twenty-four years, the Directors report is not in so satisfactory a condition as could be desired, owing, it is stated, to indifference among too many farmers and others in the township. With increased and united efforts the Society would flourish.

Manvers.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			27	23		
“ 90 Members' Subscriptions.....			104	25		
“ Admissions to Show.....			42	17		
“ Legislative Grant.....			74	76		
					248	41

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock.....	90	50				
“ “ Field Products.....	14	75				
“ “ Dairy “.....	1	50				
“ “ Horticultural Products.....	4	75				
“ “ Arts and Manufactures.....	25	00				
			136	50		
“ Prizes previous year.....			3	00		
“ Agricultural Publications.....			30	75		
“ Working Expenses.....			63	34		
					233	59
Balance in hand.....					14	82

Port Hope Horticultural Society.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			41	62		
“ 104 Members' Subscriptions.....			104	00		
“ Admissions to Show.....			12	25		
“ Legislative Grant.....			82	45		
					240	32
CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Fruits.....	7	00				
“ “ Flowers and Plants.....	18	25				
“ “ Vegetables.....	7	00				
			32	25		
“ “ Birds.....			4	75		
“ “ Ladies' Work and Fine Arts.....			15	00		
“ Working Expenses.....			53	55		
					105	55
Balance in hand.....					134	77

REPORT.

Your Directors have to congratulate you upon the pleasing fact that success has again attended the efforts of the Society, in this the second year of its existence. Notwithstanding a number of difficulties that the Society has had to contend with, we are again able to show you a membership list of 104, all *bona fide* paid up subscribers; and we have no hesitation in saying that we believe that with the same amount of exertion used in the past, the Directors and canvassers for the coming season can greatly augment the subscription list. The

beneficial effects of this Society are already apparent amongst us. It has awakened an interest in the cultivation of flowers in many who heretofore paid no attention to them, and there is evidently a growing feeling amongst gardeners and private individuals who cultivate plants and flowers, to use every effort in procuring rare plants, and of being able to exhibit such specimens at our Annual Fair at Port Hope as will cause the Port Hope Horticultural Society to rank second to none in the Dominion.

* * * * *

In this section of the country the past season, like the former one, was very unfavourable, but notwithstanding this paramount difficulty the show of flowers, plants, fruits and vegetables deserve our highest praise, and the thanks of this Society are particularly due to Messrs. John Smart and W. Mitchell for their really splendid collections of Flowers. We were also much pleased to see so many of our amateur flower growers carry off first prizes in this department, as it clearly shows that a lively interest is being taken in their cultivation. In connection with this branch we would recommend that in future a distinction be made between professional and amateur exhibitors, as it is unfair to expect that the latter could compete for the same prizes with the former, who have much better hot-houses and appliances for the development of plants and flowers.

The show of fruit was also excellent, indeed we have never seen better samples of berries, currants and cherries than were exhibited by Messrs. Simpson, Ross, Philp, Smart, Rose, Mitchell and many others too numerous to mention.

The specimens of vegetables were also very good. The early Rose potatoes, onions, cabbages, cucumbers and beets were particularly admired.

* * * * *

During the past year the Society held but one Exhibition, and your Directors would recommend that in future only one be held yearly, and that in July. It will then not clash with the Annual Fall Exhibition of the Agricultural Society, and enable you to offer larger prizes, and also, if you see fit, to furnish every subscriber with a monthly copy of some good Horticultural paper. This would, in our minds, be an inducement for many to become members, thereby proving a benefit to the Society in many ways.

The last Exhibition was held on the 14th day of July; the entrance fee charged was as heretofore the small sum of ten cents, and although the attendance was very good, there was not so large an amount collected at the door as at the preceding Fairs. * * *

In conclusion, your Directors would merely remark that although the last Fair was hastily gotten up, and, as remarked before, under many difficulties not necessary to mention, they are satisfied from the interest displayed and the articles exhibited at the last Fair, that the Society must and will be a success. Difficult as it is to start and put into operation any thing of this kind, we now feel that the greater difficulties have been surmounted, and that it now only requires the hearty co-operation of its members to make its Annual Exhibition one of the events of the year in Port Hope.

DURHAM, WEST.

	\$	cts.	\$	cts.	\$	cts.
Dr.						
To Balance in hand			101	39		
“ Members’ Subscriptions			85	00		
“ Legislative Grant.....			700	00		
“ Municipal Grant.....			406	00		
“ Miscellaneous Receipts.....			0	75		
					1,293	14
Cr.						
By Prizes for Live Stock	346	50				
“ “ Field Products	34	25				
“ “ Dairy “	18	00				
“ “ Horticultural Products.....	40	25				
“ “ Agricultural Implements.....	41	00				
“ “ Arts and Manufactures.....	105	00				
					585	00

	\$	cts.	\$	cts.	\$	cts.
By L. G. to Township Societies.....			409	00		
“ Preparing Show Grounds.....			17	80		
“ Working Expenses.....			112	58		
					1,124	38
Balance in hand					168	76

REPORT.

Your Directors have but little to report in addition to the statistical information required by the Statute.

The year has been one of scarcely average prosperity to the agriculturist. The severe and extended drought caused a great falling off in the crops, and the usual and necessary consequence has been scarcity of money, and depression in all departments of trade.

The condition of this Association will be found to be highly satisfactory and prosperous. The membership is gradually increasing, and your Directors were enabled considerably to augment the Premium List. The Fall Exhibition was among the best the Association has had. The competition was large and spirited in nearly all the classes. The attendance was large, and the unusually large sum of \$406 was taken for admission to the grounds.

The condition of the Branch Societies, in connection with this Association, your Directors are glad to know—although it is to be regretted that, with one exception, they have neglected to send in their reports previous to this meeting, as the law requires – is also generally highly prosperous.

Your Directors regret to learn, from the report of the Darlington Branch Society, that it is still seriously involved in liabilities on account of the Exhibition grounds. It is a question for this Association to consider—seeing it benefits so largely from the said expenditure—whether it is not in justice bound to do something more to aid the said Branch Society in liquidating the said debt.

The arrangement entered into last winter, by neighbouring societies, for fixing the time of their shows, and for selection of judges, was generally carried out last fall, and worked satisfactorily, so far as this Society was concerned.

Your Directors have the pleasure to submit herewith, as the law directs, a full list of members and subscriptions, a classified statement of prizes paid, and the Treasurer's statement of receipts and disbursements, from which it will be seen that, after meeting all the liabilities of the Association, the large sum of \$168 76 remains to your credit in the hands of your Treasurer.

Cartwright.

Dr.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			91	70		
“ 120 Members' Subscriptions.....			120	00		
“ Legislative Grant.....			140	00		
“ Donations.....			137	00		
					488	70
CR.						
By Prizes for Live Stock.....	113	75				
“ “ Field Products.....	31	75				
“ “ Dairy “.....	5	50				
“ “ Horticultural Products.....	7	50				
“ “ Agricultural Implements.....	2	00				
“ “ Arts and Manufactures.....	74	00				
“ “ Ploughing Match	23	00				
					257	50
“ Preparing Show Grounds.....					15	50

	\$	cts.	\$	cts.	\$	cts.
By Working Expenses.....			50	00		
					323	00
Balance in hand.....					165	70

Clarke.

Dr.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			60	42		
" 150 Members' Subscriptions.....			150	00		
" Admissions to Show.....			85	00		
" Legislative Grant.....			121	20		
" Municipal Grant.....			50	00		
Cr.					466	62
By Prizes for Live Stock.....	137	50				
" " Field Products.....	34	00				
" " Horticultural Products.....	29	90				
" " Agricultural Implements.....	29	50				
" " Arts and Manufactures.....	48	25				
			279	15		
" Prizes previous year.....			15	75		
" Preparing Show Grounds..			23	37		
" Working Expenses.....			36	15		
					354	42
Balance in hand.....					112	20

NOTE:—Nothing of special importance has occurred during the past year. The Society is steadily pursuing its important objects, and the Exhibition evinced no falling off—and a steady improvement in the agriculture of the Township is going on—more especially in the department of Live Stock.

Darlington

Dr.	\$	cts.	\$	cts.	\$	cts.
To 182 Members' Subscriptions.....			227	25		
" Admissions to Show.....			293	94		
" Legislative Grant.....			140	00		
" Donations.....			10	50		
" Miscellaneous Receipts.....			7	75		
Cr.					679	44
By Balance due Treasurer.....			93	46		
" Prizes for Live Stock.....	314	00				
" " Field Products.....	28	00				
" " Dairy ".....	11	00				
" " Horticultural Products.....	41	75				
" " Agricultural Implements.....	28	00				
" " Arts and Manufactures.....	109	25				
" " Growing Crops.....	16	00				
			548	00		
Unpaid.....			48	25		
					499	75
" Prizes of previous year.....			44	25		
" Preparing Show Grounds.....			5	25		
" Agricultural Publications.....			63	45		
" Working Expenses.....			59	89		
					766	05
Balance due Treasurer.....					86	61

REPORT.

Your Directors in submitting for your consideration the statistical information required by the Statute, take the opportunity to offer a few remarks upon the operations of the year, which in most respects will be found, they think, to compare favourably with any former year. The number of members is about the same as in the preceding year.

The Spring Fair was held at Hampton, at the usual time, and was one of average success.

The Fall Exhibition was, in the opinion of many, the finest ever held by the Society. The competition was spirited in nearly all the classes, and the whole number of entries about one hundred and fifty in advance of the preceding year.

The important convention referred to in the last report of your Directors, called for the purpose of fixing permanently the time of the exhibitions of the several Societies represented in said convention, so as not to clash with each other; and for devising some better method of selecting judges for such exhibitions, was held on the 25th of January last. All the neighbouring Societies were fully represented in said convention and conclusions were arrived at with considerable unanimity on both the objects for which the convention was called, and the arrangements made, your Directors believe, have so far been generally carried out by the contracting parties. But your Directors are sorry to report that said arrangements have so far operated adversely to the interests of this Society. Our judges were not more efficient than formerly. Their presence, as the event proved, could not be counted on with more certainty, and they were certainly not procured at less trouble and expense. Only one of the nine Judges we were promised on the first day of our Show was present, and we had no intimation up to the time their labours should have commenced that we were to be disappointed. The fixing of the time of our Show too so late in the season and after that of the County Society, was no doubt the occasion of a loss of over a hundred dollars.

* * * *

Your Directors have not been unmindful of the salutary rule to keep the expenditure within the income, and it will be found that the latter exceeds the former by a small amount. It is to be regretted however that nothing has been done during the year to liquidate the old claims standing against the Society, which it will be seen amounts to the large sum of \$639.42. This is a matter of very serious concern, and unless prompt and vigorous steps be taken to deal with it, the best interests of the Society will be imperiled.

ELGIN EAST.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			428	92		
" 102 Members' Subscriptions			102	00		
" Admissions to Show.....			102	37		
" Legislative Grant.....			700	00		
" Miscellaneous Receipts.....			10	00		
			————— 1343 29			
CR.						
By Prizes for Live Stock ...	270	37				
" " Field Products.....	24	10				
" " Dairy "	13	50				
" " Horticultural Products.....	14	74				
" " Agricultural Implements.....	7	00				
" " Arts and Manufactures	32	25				
" " Ploughing Match.....	5	00				
	366	96				
" " Unpaid	45	98				
					320	98
" L. G. to Township Societies					418	00

	\$	cts.	\$	cts.	\$	cts.
By Preparing Show Grounds.....			216	76		
“ Working Expenses.....			97	92		
					1053	66
Balance in hand.....					289	63

Bayham.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			31	18		
“ 139 Members' Subscriptions			139	00		
“ Admissions to Show.....			75			
“ Legislative Grant			140	00		
CR.					310	93
By Prizes for Live Stock	117	02				
“ “ Field Products.....	24	61				
“ “ Dairy “	12	36				
“ “ Horticultural Products.....	14	36				
“ “ Agricultural Implements.....	3	50				
“ “ Arts and Manufactures.....	22	11				
	193	96				
“ “ Unpaid.....	2	42				
			191	54		
“ Prizes of previous year.....			6	74		
“ Preparing Show Grounds			39	15		
“ Working Expenses			20	77		
					258	20
Balance in hand.....					52	73

Dorchester, South.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			5	35		
“ 62 Members' Subscriptions			62	00		
“ Legislative Grant			61	00		
“ Municipal Grant.....			4	00		
“ Miscellaneous Receipts.....			23	75		
CR.					156	10
By Prizes for Live Stock.....	49	50				
“ “ Field Products	18	50				
“ “ Dairy “	4	75				
“ “ Horticultural Products	5	25				
“ “ Arts and Manufactures.....	9	00				
			87	00		
“ Preparing Show Grounds			33	75		
“ Working Expenses.....			25	11		
					145	86
Balance in hand					10	24

Malahide.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			62	00		
“ 117 Members' Subscriptions.....			117	00		
“ Admissions to Show			59	58		
“ Legislative Grant			119	00		
					357	58

Cr.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock.....	118	60				
“ “ Field Products	25	12				
“ “ Dairy “	12	00				
“ “ Horticultural Products.....	2	78				
“ “ Agricultural Implements.....	14	00				
“ “ Arts and Manufactures.....	28	76				
“ “ Ploughing Match.....	19	00				
			220	26		
“ Preparing Show Grounds			17	00		
“ Agricultural Publications.....			4	00		
“ Working Expenses			41	04		
					282	30
Balance in hand					75	28

Yarmouth.

Dr.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			79	00		
“ 96 Members' Subscriptions.....			96	00		
“ Legislative Grant			98	00		
“ Proceeds Sale of Live Stock			57	10		
“ Miscellaneous Receipts.....			72			
					330	82
Cr.						
By Prizes for Live Stock.....	160	55				
“ “ Field Products	16	97				
“ “ Dairy “	4	50				
“ “ Horticultural Products.....	3	16				
“ “ Agricultural Implements.....	0	75				
“ “ Arts and Manufactures.....	16	55				
	202	48				
“ “ Unpaid	19	01				
			183	47		
“ Prizes of previous year			18	20		
“ Working Expenses.....			51	44		
					253	11
Balance in hand					77	71

ELGIN, WEST.

Dr.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			218	11		
“ 174 Members' Subscriptions			174	00		
“ Admissions to Show			169	55		
“ Legislative Grant			700	00		
“ Miscellaneous Receipts.....			19	00		
					1,280	66
Cr.						
By Prizes for Live Stock	279	00				
“ “ Field Products	43	90				
“ “ Dairy “	17	70				
“ “ Horticultural Products.....	10	30				
“ “ Agricultural Implements.....	59	00				

	\$ cts.	\$ cts.	\$ cts.
By Prizes for Arts and Manufactures	47 38		
" " Growing Crops	3 80		
	<hr/>		
" " Unpaid.....	461 08		
	82 80		
	<hr/>		
" " For previous year		378 28	
" L. G. to Township Societies.....		15 95	
" Preparing Show Grounds.....		280 00	
" Prizes at Spring Show		83 30	
" Working Expenses.....		155 00	
		154 56	
		<hr/>	
			1,067 09
			<hr/>
Balance in hand			213 57

Aldborough.

DR.	\$ cts.	\$ cts.	\$ cts.
To 162 Members' Subscriptions.....		165 00	
" Legislative Grant.....		140 00	
" Municipal Grant.....		20 00	
" Miscellaneous Receipts.....		10 50	
		<hr/>	
			335 50
CR.			
By Balance due Treasurer		9 56	
" Prizes for Live Stock.....	123 70		
" " Field Products	16 80		
" " Dairy "	4 50		
" " Horticultural Products.....	4 45		
" " Agricultural Implements.....	7 25		
" " Arts and Manufactures.....	30 30		
	<hr/>		
	187 00		
" " Unpaid.....	35 20		
	<hr/>		
" " For previous year.....		151 80	
" Preparing Show Grounds.....		80 95	
" Purchase of Live Stock.....		2 40	
" Agricultural Publications.....		37 50	
" Working Expenses.....		12 85	
		56 77	
		<hr/>	
			351 83
			<hr/>
Balance due Treasurer.....			16 33

NOTE.—The Directors report the Society to be in a satisfactory condition, and that both the spring and fall Exhibitions fully sustained their former positions.

Southwold and Dunwich.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		112 26	
" 149 Members' Subscriptions		149 00	
" Admissions to Show		21 70	
" Legislative Grant.....		140 00	
" Proceeds Sale of Live Stock		352 50	
" Miscellaneous Receipts		21 00	
		<hr/>	
			796 46

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock	86	40				
" " Field Products	9	80				
" " Dairy "	17	50				
" " Horticultural Products.....	7	85				
" " Agricultural Implements.....	9	35				
" " Arts and Manufactures.....	26	60				
" " Growing Crops	2	25				
	159	75				
" " Unpaid.....	15	00				
			144	75		
" Prizes of previous year			21	70		
" Preparing Show Grounds.....			18	43		
" Purchase of Live Stock.....			434	47		
" Working Expenses.....			125	36		
					744	71
Balance in hand					51	75

ESSEX.

DR	\$	cts.	\$	cts.	\$	cts.
To Balance in hand	243	89				
" 104 Members' Subscriptions.....	104	00				
" Admissions to Show.....	80	10				
" Legislative Grant	700	00				
" Miscellaneous Receipts	17	00				
					1,144	99
CR.						
By Prizes for Live Stock	179	55				
" " Field Products	50	09				
" " Dairy "	14	00				
" " Horticultural Products.....	21	25				
" " Agricultural Implements.....	10	49				
" " Arts and Manufactures	48	05				
	323	43				
" " Unpaid	9	94				
			313	49		
" L. G. to Township Societies.....			418	32		
" Preparing Show Grounds			63	40		
" Working Expenses			85	17		
					880	38
Balance in hand.....					264	61

REPORT.

* * * *

The Annual Exhibition of the Society was held in the town of Amherstburg on the 12th and 13th of October. The Show on this occasion was in many respects a repetition of former years.

The number of entries was 514, a little in excess of previous years. The entries in the different classes were as follows: horses, 90; cattle, 38; sheep, 34; pigs and poultry, 19; seeds and roots, 94; fruits, 47; dairy and provisions, 32; home manufactures, 86; and ladies' work, 79.

Some excellent light carriage horses were exhibited; and we should judge from the description of horses shown that the farmers of this County have gone almost exclusively into raising horses more adapted for the saddle, and driving in light carriages, than for the heavier work of the farm and other draught purposes; and of those exhibited as draught horses very few, strictly speaking, could be considered as such.

That the efforts and attention of the farmers should be directed to the producing of a larger and heavier class of horses, adapted for the roughest kind of work, is desirable if they wish to produce such animals as will command a ready price.

In cattle, the Shorthorns, Ayrshires, Devons and Galloways, with their grades, were represented; while great improvement in the last few years have been made in cattle by the introduction of pure bred bulls, mainly through the efforts of the several Township Societies. There is much to be done before the cattle of this County can compare favourably with other sections of this Province.

What is said of cattle might with equal propriety be said of sheep. Improvements made in sheep for the past twenty years have been caused mainly through the introduction of pure bred male animals amongst them. Very few fine bred ewes, at any time, have been introduced; the result is that, while most excellent sheep are owned and raised by the farmers of the County, very few of the owners can claim that their stock is pure. The destruction of sheep by dogs has been a great drawback in the raising of them within the County, and, as yet, nothing that has been devised has remedied or lessened the evil, as the depredations are usually committed in the night time; not one out of twenty is caught in the act, the consequence is that the farmers have no alternative but to accept for their loss what parsimonious Township Councils may see fit to award.

As usual, the show of pigs was very meagre, the trouble of bringing them to the Fair grounds must, we think, be the principal cause, (for the farmer, of all members of the community, dislikes trouble unless it pays well,) for there are splendid pigs raised in the county, as the very large production of heavy pork sent every season to market amply testifies.

Very little attention is given to poultry; that is in introducing foreign breeds. Mongrels of all sorts can be found in all localities, and on many farms the same description of fowls exist now that pleased our grandfathers fifty years ago.

* * * *

The Fruits of 1870 were excellent, and in most localities abundant. Many fruit trees of superior kinds, have been introduced of late years. It must be seen however that that attention to fruit-growing which its importance demands, has not yet been accorded to it.

Great carelessness on the part of those who pretend to cultivate fruit is exhibited. Many orchards are planted, and through neglect or ignorance, or both, are allowed to go to waste. Geese and sheep are often seen barking the trunks, and cattle are permitted to run in many orchards, destroying the trees by browsing the limbs.

That the best fruit of all kinds can be raised in this County is clearly established; and if the people will only pay a little more attention to preparing the ground in a suitable manner, selecting the best and choicest varieties; and after planting, give due attention to preserving the trees from the depredations of all animals, from the insignificant mouse to the favourite horse or bull, which is often permitted to roam the orchards, and a judicious use of the pruning knife, there is no reason why we could not enter into competition with any part of Canada or the United States.

The question of butter and cheesemaking is now occupying more of the attention of the farmers than hitherto; although no extensive factory has been established, many individuals have gone into cheese-making on a small scale, and have realized handsome profits by so doing.

For dairy purposes the County of Essex cannot be excelled by any other part of Canada, being the most southern part of Canada the winters are shorter, and the climate not as cold by eight or ten degrees. Besides the grasses, (in many places growing spontaneously) we can grow all kinds of roots necessary for stock, in abundance, and Indian corn, a product that is grown to perfection, easily cultivated, and yielding from forty to eighty bushels to the acre, the grain of which when crushed is an excellent article of food for stock, and the fodder when properly saved, equal to the best timothy or clover hay.

The manufacturing of farming implements has not as yet been very extensive; besides the making of ploughs, cornshellers, cultivators and the like, very little has been attempted.

For such articles as threshing machines, mowing and reaping machines, drills and the like, this County is beholden to other places. In some other manufactures we are more fortunate. We have woollen mills which turn out goods of the best quality and description made out of wool grown at home.

The planing, sash and door factories are noted for the excellence of their work.

The several carriage shops of the County compare favourably in the articles they produce with any we have seen elsewhere.

The different kinds of leather manufactured by our tanneries find a ready sale in Montreal and other eastern markets. Two broom factories have gone into operation since the last report, and are flourishing, although much of the material had to be imported. It is to be hoped that the farmers will be induced to enter most thoroughly into the cultivation of broom corn, for the growth of which this County is well adapted.

In conclusion, possessing as it does many advantages, Essex might, with a proper display of energy and enterprise on the part of its inhabitants, become in a few years one of the first Counties in the Dominion.

Colchester.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		186 78	
" 14 Members' Subscriptions		14 00	
" Proceeds of Services for Horse		20 00	
" Error in last Account		17 22	
" Miscellaneous Receipts		15 50	
		<u>253 50</u>	
CR.			
By Working Expenses		15 00	
		<u>15 00</u>	
Balance in hand			238 50

NOTE.—In consequence of the very small number of members the Society held no Show, nor received any public grant.

Gosfield and Mersea.

DR.	\$ cts.	\$ cts.	\$ cts.
To 121 Members' Subscriptions		121 00	
" Legislative Grant		121 60	
" Sale of Seeds		33 59	
" Proceeds Sale of Live Stock		165 50	
" Notes, last year		11 08	
" Notes on hand for stock sold		290 50	
		<u>743 27</u>	
CR.			
By Balance due Treasurer		1 00	
" Purchase of Live Stock	437 25		
" Purchase of Seed	21 00		
	<u>458 25</u>		
" Loan		113 60	
" Working Expenses		8 54	
		<u>581 39</u>	
Balance in hand			161 88

Malden and Anderson.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		64 33	
" Members' Subscriptions		57 50	
" Legislative Grant		56 53	
" Proceeds Sale of Stock		55 00	
		<u>233 36</u>	

CR.	\$ cts.	\$ cts.	\$ cts.
By Agricultural Publications.....		46 00	
" Working Expenses		18 95	
		<u>64 95</u>	
Balance in hand.....			168 41

NOTE.—The directors report that they are reserving their funds for a large purchase of Live Stock, and that the Society is in an efficient state. The Colorado potato beetle had shown itself for the first time, and fears were entertained that it might become destructive as it has been of late years in the Western States.

Rochester.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		1 90	
" Members' Subscriptions.....		125 70	
" Legislative Grant.....		117 04	
		<u>244 64</u>	
CR.			
By Prizes for Live Stock.....	13 00		
" " Field Products.....	2 50		
" " Agricultural Implements	1 00		
	<u>16 50</u>		
Unpaid	8 50		
		<u>8 00</u>	
" Purchase of Live Stock.....		219 15	
" Working Expenses.....		20 75	
		<u>247 90</u>	
Balance due Treasurer.....			3 26

Maidstone and Sandwich.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		18 96	
" 64 Members' Subscriptions.....		66 00	
" Legislative Grant.....		61 30	
" Miscellaneous Receipts.....		3 88	
		<u>150 14</u>	
CR.			
By Prizes for Live Stock.....	16 00		
" Purchase of Live Stock.....	72 00		
" Working Expenses.....	7 46		
		<u>95 46</u>	
Balance in hand.....			54 68

Tilbury, West.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		63 21	
" 66 Members' Subscriptions.....		66 00	
" Admissions to Show.....		2 00	
" Legislative Grant.....		66 33	
" Proceeds Sale of Seeds.....		10 73	
		<u>208 27</u>	
CR.			
By Prizes for Live Stock.....	43 75		
" " Field Products.....	12 50		
" " Dairy "	0 75		

	\$	cts.	\$	cts.	\$	cts.
By Prizes for Horticultural Products.....	9	00				
“ “ Agricultural Implements.....	2	00				
“ “ Arts and Manufactures.....	4	00				
	72	00				
Unpaid.....	44	25				
			27	75		
“ “ for previous year.....			40	00		
“ Preparing Show Grounds.....			2	75		
“ Purchase of Live Stock.....			38	00		
“ “ “ Seed.....			14	29		
“ Working Expenses.....			16	58		
					139	37
Balance in hand.....					63	90

FRONTENAC.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			169	12		
“ 144 Members' Subscriptions.....			185	50		
“ Admissions to Show.....			89	11		
“ Legislative Grant.....			700	00		
“ Miscellaneous Receipts.....			8	00		
					1151	73
CR.						
By Prizes for Live Stock.....	298	75				
“ “ Field Products.....	49	25				
“ “ Dairy “	24	50				
“ “ Horticultural Products.....	34	00				
“ “ Agricultural Implements.....	37	75				
“ “ Arts and Manufactures.....	91	50				
“ “ Growing Crops.....	2	75				
	538	50				
Unpaid.....	12	00				
			526	50		
Prizes of previous year.....			5	50		
“ L. G. to Township Societies.....			305	00		
“ Preparing Show Grounds.....			11	06		
“ Working Expenses.....			182	67		
					1030	73
Balance in hand.....					121	00

Pittsburgh.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			4	33		
“ Members' Subscriptions.....			47	00		
“ Legislative Grant.....			100	00		
					151	33
CR.						
By Prizes for Live Stock.....	94	45				
“ “ Field Products....	14	50				
“ “ Dairy “	13	75				
					122	70

	\$ cts.	\$ cts.
By Working Expenses	26 65	
	<hr/>	149 35
Balance in hand.....		1 98

Storrington.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		3 53	
" 26 Members' Subscriptions.....		39 00	
" Legislative Grant.....		100 00	
		<hr/>	142 53

Cr.			
By Prizes for Live Stock.....	82 11		
" " Field Products.....	14 36		
" " Dairy "	6 00		
" " Horticultural Products.....	2 66		
" " Agricultural Implements.....	4 75		
" " Arts and Manufactures.....	13 75		
	<hr/>	123 63	
" Working Expenses.....		14 14	
		<hr/>	137 77
Balance in hand.....			4 76

Wolfe Island.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		27 00	
" 76 Members' Subscriptions.....		76 00	
" Legislative Grant.....		105 00	
		<hr/>	208 00

Cr.			
By Prizes for Live Stock.....	92 60		
" " Field Products.....	10 00		
" " Dairy "	9 25		
" " Horticultural Products.....	11 75		
" " Arts and Manufactures.....	16 75		
" " Ploughing Match.....	16 00		
	<hr/>	156 35	
" Working Expenses.....		41 50	
		<hr/>	197 85
Balance in hand.....			10 15

GLENGARRY.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		21 85	
" Members' Subscriptions.....		154 50	
" Admissions to Show.....		53 00	
" Legislative Grant		700 00	
		<hr/>	929 35

Cr.			
By Prizes for Live Stock.....	231 00		
" " Field Products.....	78 00		
" " Dairy "	52 50		

	\$ cts.	\$ cts.	\$ cts.
By Prizes for Horticultural Products.....		6 25	
" " Agricultural Implements.....		57 25	
" " Arts and Manufactures.....		69 00	
		<u>1 50</u>	494 00
" Prizes of previous year		263 00	
" L. G. to Township Societies		16 37	
" Preparing Show Grounds.....		129 30	
" Working Expenses.....		<u>410 17</u>	
			904 17
			<u>25 18</u>
Balance in hand.....			25 18

Charlottenburgh and Lancaster.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		459 53	
" 61 Members' Subscriptions		67 00	
" Legislative Grant		123 00	
		<u>649 53</u>	
CR.			
By Prizes for Live Stock	119 33		
" " Dairy Products	8 00		
" " Growing Crops	52 00		
" " Ploughing Match.....	9 00		
	<u>188 33</u>		
" Purchase of Seed		280 00	
" Working Expenses.....		41 00	
		<u>509 33</u>	
Balance in hand.....			140 20

Lochiel and Kenyon.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		15 12	
" 36 Members' Subscriptions.....		83 00	
" Legislative Grant		140 00	
		<u>238 12</u>	
CR.			
By Prizes for Live Stock.....	102 00		
" " Dairy Products.....	17 15		
" " Arts and Manufactures	16 16		
" " Growing Crops.....	66 80		
" " Ploughing Match.....	11 05		
	<u>213 16</u>		
" Working Expenses		23 95	
		<u>237 11</u>	
Balance in hand.....			1 01

GRENVILLE, SOUTH.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		190 45	
" 284 Members' Subscription.....		287 00	

	\$ cts.	\$ cts.	\$ cts.
" Admissions to Show.....		658 50	
" Legislative Grant		700 00	
" Amount of Directors' Note.....		150 00	
" Rent of house, booth, &c.....		77 00	
" Donation of W. Shanly, Esq., M. P.....		40 00	
CR.....			2102 95
By Prizes for Live Stock.....	252 00		
" " Field Products.....	104 50		
" " Dairy ".....	40 00		
" " Horticultural Products	52 00		
" Agricultural Implements.....	64 00		
" " Arts and Manufactures.....	128 00		
		640 50	
" L. G. to Township Societies		140 00	
" Preparing Show Grounds.....		437 35	
" Amount of Directors' Note....		150 00	
" Agricultural Publications.....		13 00	
" Working Expenses.....		375 40	
			1756 25
Balance in hand.....			346 70

REPORT.

* * * *

The Thirteenth Annual Exhibition was held at Prescott, on the Society's grounds, on the three last days of September, and proved successful far beyond expectation.

The unusual interest evinced this year by the public, in the attractions of the Exhibition, was not only encouraging to the Directors, but materially increased the funds of the Society.

Each day, from an early hour of the morning, the grounds were crowded with a large concourse of visitors, and the Floral Hall was literally packed from the opening to the close. Notwithstanding this excessive crush and crowding that continually prevailed, not the least unpleasantness occurred to mar the pleasures of the most fastidious. Indeed the high tone of respectability and intelligence that characterized the throng must have been suggestive, even to the most superficial observer, of the unabated progress of the Society, and of the superior standing of the agricultural community of this district. In order to render the Exhibition more popular and attractive, your Directors had recourse to a more extended system of advertising, and to a more varied and entertaining programme of amusements. Music having long been felt as a great desideratum, the large sum of fifty dollars was agreed for musical competition, and an invitation extended to all the bands of Ontario to take part in the harmonious strife.

* * * *

In consequence of the extreme heat and unprecedented drought of the past summer, the number of entries was not so large, though the articles and animals were not, in consequence, of a more inferior quality.

In horses, there was a very large number shown, embracing some handsome stallions and several fine brood mares with foal. The small increase in the premiums for single and matched carriage horses had the effect of bringing some of the finest teams of Brockville, Smith's Falls, Kemptville and Ottawa in competition with our own.

A most creditable display of pure blood was shown in the class of Durhams. A fine drove of thorough bred, owned by Mr. Wm. Binions, of Dundas, carried off in prizes a large sum, which, it is to be hoped, will still further stimulate him to persevere in this important branch of farming.

In Ayrshires, grades and natives, Messrs. Millar and Morrison were the two more successful competitors, sustaining on this occasion their well earned reputation for excellent stock.

The display of sheep was most excellent, particularly in Leicesters and South Downs; many superior animals of these two breeds being shown. Discretionary prizes were awarded to some fine specimens of Merino and Cotswold, each of which should now have a class allotted to it on the prize list.

Swine and poultry were rather meagre in numbers, but the quality very superior.

In agricultural implements there was very little competition. Seeing that there are no manufactories of these articles in our midst, and that exhibitors must come from a distance, the new Directors should considerably increase the premiums in this class, in order to impress the farmer with the great utility of these machines. For it is well known that bleak and unfavoured Scotland has become one of the best farming countries of Europe largely through the means of these labour-saving implements.

In the Agricultural and Horticultural departments, the effects of the excessive drought were plainly visible. The samples of grain were not of a very superior quality, and the display of roots and vegetables, which other years was not inferior to that of the Provincial Exhibition, was on this occasion somewhat below par.

The judges had, as usual, a very difficult task in awarding the prizes on butter, but the competition in cheese was chiefly confined to a few good samples of home made manufacture. Domestic manufactures were, as usual, one of the most attractive departments of the Floral Hall, and the magnificent display of ladies' work, which seemed to absorb all attention, plainly showed how much of the success of the Exhibition was due to the exertions of the fair sex.

Your Directors, in presenting their Annual Report, would be but indifferently performing their task did they not record, in a special manner, their hearty thanks to your old patron, W. Shanly, Esq., M. P., who, by his constant presence, as well as by his large donations, evinces the permanent interest he feels in the welfare of the farmers of his constituency.

Edwardsburgh.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		18 57	
“ Members’ Subscriptions		70 38	
“ Admissions to Show		25 44	
“ Legislative Grant.....		140 00	
“ Miscellaneous Receipts		10 50	
		<hr/>	264 89
Cr.			
By Prizes for Live Stock	79 50		
“ “ Field Products	69 50		
“ “ Dairy Products	9 00		
“ “ Horticultural Products.....	24 20		
“ “ Arts and Manufactures.....	33 55		
		<hr/>	215 75
“ Working Expenses.....		41 05	
		<hr/>	256 80
Balance in hand.....			8 09

REPORT.

The Directors of the Edwardsburgh Agricultural Society have much pleasure in reporting that their Annual Show held at Spencerville, on the 19th and 20th days of September, 1870, was numerously attended, the weather being delightful. There was a slight falling off in the number of entries owing to the severe drought last season, in this locality. The show of horses was not what could be desired, especially aged horses, owing perhaps to the steady drain for the American market. Among the young horses there were some promising animals. The show of cattle was better than in former years, being mostly descendants from the splendid bulls formerly owned by the Society. There was also a visible improvement in sheep, several pens of Leicesters and Southdowns being exhibited. There was a slight improve-

ments in hogs, the Berkshire taking the place of the late common breeds. In grain there was a great falling off owing to the dry season. There was an excellent display of potatoes and roots, the potatoes in particular being the wonder and admiration of the fair, and would compare favourably with the first prize potatoes at the Provincial fair. The garden vegetables were not so good as in former years, the cabbage and cauliflower being almost a total failure. In dairy products there was a small show, but the quality was very good.

GREY, NORTH,

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		92 28	
“ Members’ Subscriptions		100 50	
“ Admissions to Show		8 00	
“ Legislative Grant		700 00	
“ Miscellaneous Receipts		12 50	
CR.			913 28
By Prizes for Live Stock	181 50		
“ “ Field Products.....	78 00		
“ “ Dairy	20 50		
“ “ Horticultural Products	27 50		
“ “ Agricultural Implements..	19 00		
“ “ Arts and Manufactures	38 00		
	364 50		
“ “ Unpaid	55 25		
		309 15	
“ L. G. to Township Societies.....		418 20	
“ Preparing Show Grounds		11 70	
“ Working Expenses.....		77 90	
		817 05	
Balance in hand.....			96 23

Collingwood.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		28 13	
“ Members’ Subscriptions.....		132 00	
“ Admissions to Show.....		40 73	
“ Legislative Grant.....		79 00	
“ Miscellaneous Receipts.....		22 25	
CR.			302 11
“ Prizes for Live Stock	88 00		
“ “ Field Products.....	19 50		
“ “ Dairy “	6 25		
“ “ Horticultural Products.....	6 75		
“ “ Agricultural Implements.....	15 50		
“ “ Arts and Manufactures.....	16 00		
“ “ Ploughing Match.....	37 00		
	189 00		
Unpaid.....	37 00		
		152 00	
“ Preparing Show Grounds.....		64 00	
“ Working Expenses.....		80 16	
		296 16	
Balance in hand			5 95

Derby.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		0 23	
" 89 Members' Subscriptions.....		89 00	
" Admissions to Show.....		10 75	
" Legislative Grant.....		52 20	
" Municipal Grant.....		10 00	
" Miscellaneous Receipts.....		9 00	
CR.			171 18
By Prizes for Live Stock.....	61 50		
" " Field Products.....	19 25		
" " Dairy ".....	10 50		
" " Horticultural Products.....	3 25		
" " Agricultural Implements.....	6 75		
" " Arts and Manufactures.....	10 00		
" " Ploughing Match.....	11 50		
		122 75	
" Working Expenses.....		38 01	160 76
			10 42
Balance in hand.....			

Euphrasia.

DR.	\$ cts.	\$ cts.	\$ cts.
To Members' Subscriptions.....		77 00	
" Admissions to Show.....		0 90	
" Legislative Grant.....		37 80	
CR.			115 70
By Prizes for Live Stock.....	69 50		
" " Field Products.....	15 50		
" " Dairy ".....	5 00		
" " Horticultural Products.....	4 75		
" " Arts and Manufactures.....	6 50		
	101 25		
Unpaid.....	30 25		
		71 00	
" Working Expenses.....		11 06	
			82 06
			33 64
Balance in hand.....			

Holland & Sullivan.

DR.	\$ cts.	\$ cts.	\$ cts.
To 62 Members' Subscriptions.....		76 00	
" Legislative Grant.....		40 80	
			116 80
CR.			
By Prizes for Live Stock.....	50 50		
" " Field Products.....	15 25		
" " Dairy ".....	7 75		
" " Horticultural Products.....	17 50		
" " Agricultural Implements.....	8 00		
		99 00	
" Working Expenses.....		25 00	
			124 00
			7 20
Balance due Treasurer.....			

St. Vincent.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		40 26	
“ Members’ Subscriptions.....		124 00	
“ Admissions to Show.....		13 56	
“ Legislative Grant		61 20	
“ Miscellaneous Receipts ..		9 25	
		<u>248 27</u>	
CR.			
By Prizes for Live Stock	94 00-		
“ “ Field Products	27 25		
“ “ Dairy “	4 50		
“ “ Horticultural Products	2 25		
“ “ Agricultural Implements	22 25		
“ “ Arts and Manufactures	36 05		
“ “ Ploughing Match.....	41 25		
	<u>227 55</u>		
Unpaid.....	92 55		
		<u>135 00</u>	
“ Prizes of previous year		4 00	
“ Prizes previous year		32 00	
“ Working Expenses		35 55	
		<u>206 55</u>	
Balance in hand			<u>41 72</u>

Sydenham.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		42 19	
“ 88 Members Subscriptions		93 90	
“ Admissions to Show		4 65	
“ Legislative Grant.....		50 40	
		<u>190 24</u>	
CR.			
By Prizes for Live Stock	69 75		
“ “ Field Products	31 75		
“ “ Dairy “	6 75		
“ “ Horticultural Products	11 25		
“ “ Agricultural Implements.....	3 00		
“ “ Arts and Manufactures	6 50		
	<u>129 00</u>		
Unpaid	11 50		
		<u>117 50</u>	
“ Prizes Previous Year ..		8 50	
“ Subscription to County Society for Spring Show		5 00	
“ Working Expenses		29 81	
		<u>160 81</u>	
Balance in hand			<u>29 43</u>

Owen Sound Horticultural Society.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		98 78	
“ 99 Members’ Subscriptions.....		99 00	
“ Admissions to Show.....		24 70	

	\$	cts.	\$	cts.	\$	cts.
To Legislative Grant.....			62	40		
" Miscellaneous Receipts.....			3	29		
					288	17
CR.						
By Prizes for Fruits.....	25	50				
" " Flowers and Plants.....	22	00				
" " Vegetables.....	60	00				
" " Ladies Work, &c.....	27	50				
			135	00		
" Preparing Show Grounds.....			40	96		
" Working Expenses.....			35	29		
					211	25
Balance in hand.....					76	92

GREY, SOUTH.

	\$	cts.	\$	cts.	\$	cts.
Dr.						
To Balance in hand.....			49	82		
" Members' Subscriptions.....			34	00		
" Admissions to Show..			12	19		
" Legislative Grant.....			700	00		
					796	01
CR.						
By Prizes for Live Stock.....	92	75				
" " Field Products.....	46	25				
" " Dairy Products, Maple Sugar, &c.....	12	50				
" " Horticultural Products.....	13	50				
" " Agricultural Implements.....	28	50				
" " Arts and Manufactures.....	25	00				
	218	50				
Unpaid.....	48	00				
			170	50		
" Prizes of previous year.....			41	75		
" L. G. to Township Societies.....			419	78		
" Preparing Show Grounds.....			10	50		
" Working Expenses.....			92	78		
					735	31
Balance in hand.....					60	70

REPORT.

Your Directors in presenting for your approval the annual Report of your Society's operations for the past year, regret that the Fall Exhibition (there being no Spring one) held at Durham on the 29th September, on the whole was not a success, there being little competition, although for agricultural implements, the show was thrown open to the Province of Ontario.

Your Directors believe that several things combined to produce this effect.

And 1st. The prize list of the previous year, owing to the erection of the Agricultural Hall was below mediocrity, and owing to the demise of the Secretary Treasurer, some irregularities unavoidably occurred.

2nd. The prize List of current year as compared with neighbouring division Shows, was miserably meagre, so much so that farmers could not see the chance of making the expenses attendant on bringing out their stock even should they be successful.

3rd. That while neighbouring County Councils contribute largely to the funds of their respective Societies, thus handsomely supplementing the Government Grant, we have hitherto overlooked this reasonable source of assistance.

4th. The not merging of local or adjoining Township Society's funds with your Society and the want of a discriminating prize list, and not left for the last two weeks before the Exhibition.

The ravages of the wheat midge have also contributed.

As most of these causes are within the power of your Society to rectify, it is to be hoped that they are only incidental, and that another year's operations will present a more prosperous state of things.

Your Directors congratulate your Society on the commodious Hall and Grounds procured and paid for, although one acre of land is a rather small provision for Exhibition purposes.

Your Directors concur in the opinion that the great want of the Riding is the importation into it of improved stock, especially since our great staple—wheat—has to be partially abandoned on account of the midge pest. Even now the raising of inferior grade stock is found to pay; how much more so, those splendid breeds to be seen about Guelph and other parts of the Province.

This Riding, notwithstanding the long and severe winters, is particularly adapted to the raising of stock. Grass, hay, turnips and mangle-wurzel all do well, especially grass and turnips.

Your Directors hope the vexed question of Railway service, which has distracted this neighbourhood, will find a solution ere long, and that the energies of so many of the friends of your Society now diverted, will be engaged in the furtherance and development of its interests.

* * * * *

Artemesia.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			20	97		
" Members' Subscriptions			61	25		
" Legislative Grant			44	90		
" Municipal "			20	00		
" Miscellaneous Receipts			0	25		
					147	37
CR.						
By Prizes for Live Stock	49	00				
" " Field Products	23	95				
" " Dairy "	2	70				
" " Horticultural Products	6	75				
" " Agricultural Implements	3	00				
" " Arts and Manufactures	11	75				
				97	15	
" " Working Expenses				20	88	
					118	03
					29	34

Egremont.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			161	03		
" 87 Members' Subscriptions			87	00		
" Legislative Grant			63	60		
					311	63
CR.						
By Prizes for Live Stock	77	25				
" " Field Products	27	70				
" " Dairy "	14	50				

	\$	cts.	\$	cts.	\$	cts.
By Prizes for Horticultural Products	11	30				
" " Agricultural Implements	8	50				
" " Arts and Manufactures	21	50				
				160	75	
" Preparing Show Ground.....				20	00	
" Working Expenses				30	87	
						211 62
Balance in hand						100 01

Bentinck and Glenely.

DR.	\$	cts.	\$	cts.	\$	cts.
To 27 Members' Subscriptions.....			27	00		
" Legislative Grant.....			27	03		
						54 03
CR.						
By Balance due Treasurer			3	00		
" Prizes of previous year			1	00		
" Working Expenses			1	00		
						5 00
Balance in hand.....						49 03

Melancthon.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			37	47		
" 52 Members' Subscriptions			52	00		
" Admissions to Show			10	55		
" Legislative Grant.....			41	30		
						141 32
CR.						
By Prizes for Live Stock	36	25				
" " Field Products.....	19	25				
" " Dairy "		6 50				
" " Horticultural Products		1 25				
" " Agricultural Implements		4 25				
" " Arts and Manufactures.....	18	00				
				85	50	
" Working Expenses.....				41	80	
						127 30
Balance in hand.....						14 02

Normanby.

DR.	\$	cts.	\$	cts.	\$	cts.
To 105 Members' Subscriptions			105	00		
" Admissions to Show.....			12	00		
" Legislative Grant.....			83	50		
" Municipal Grant			25	00		
						225 50
CR.						
By Prizes for Live Stock.....	44	25				
" " Field Products.....	40	35				
" " Dairy "		12 50				
" " Horticultural Products.....		13 75				
" " Agricultural Implements.....		15 50				

	\$	cts.	\$	cts.	\$	cts.
By Prizes for Arts and Manufactures	12	94				
“ Working Expenses.....			130	25		
			24	75		
					163	99
Balance in hand.....					61	51

Osprey.

DR:	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			11	11		
“ 63 Members' Subscriptions ..			64	00		
“ Admissions to Show.....			7	95		
“ Legislative Grant.....			49	30		
					132	36

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock	66	25				
“ “ Field Products.....	23	25				
“ “ Dairy “	1	50				
“ “ Horticultural Products	0	50				
“ “ Agricultural Implements.....	4	00				
“ “ Arts and Manufactures	13	25				
			108	75		
“ Prize of previous year.....			0	50		
“ Working Expenses.....			23	11		
					132	36

Proton.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			4	54		
“ 50 Members' Subscriptions			50	00		
“ Legislative Grant			39	75		
“ Cash for suit against County Society			66	32		
					160	61

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock	39	50				
“ “ Field Products.....	14	75				
“ “ Dairy “	5	50				
“ “ Arts and Manufactures.....	10	00				
			69	75		
“ Prizes of previous year.....			60	89		
“ Preparing Show Grounds.....			2	00		
“ Working Expenses.....			29	67		
					162	31
Balance due Treasurer.....					1	70

HALDIMAND.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			29	79		
“ 157 Members' Subscriptions.....			207	00		
“ Admissions to Show.....			19	12		
“ Legislative Grant.....			700	00		
“ Municipal Grant.....			50	00		
“ Miscellaneous Receipts.....			12	50		
					1018	41

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock.....	304	00				
" " Field Products.....	30	00				
" " Dairy ".....	13	00				
" " Horticultural Products.....	18	25				
" " Agricultural Implements.....	44	75				
" " Arts and Manufactures.....	24	50				
			—	—	434	50
" L. G. to Township Societies.....					410	00
" Preparing Show Grounds.....					13	00
" Working Expenses.....					75	00
					—	—
					932	50
Balance in hand.....					85	91

REPORT.

* * * * *

We can congratulate ourselves as we look over the broad acres of our County, and note the improved condition of things presented by the farm and farmyard. That the past year has been one of great advancement, and that the interest taken by our farmers in improving Stock and in trying new expedients is manifestly on the increase; a circumstance deeply interesting to all who keep in mind that our country's every interest, domestic, commercial, and international, is inextricably interwoven with the progress made by the sturdy yeomen who cultivate its soil.

Throughout the County the crops for the past year have been good in the main, and the present indication of the wheat crop was never better, and we may safely say not so good. The usual Shows were all held and proved to be superior to previous years both in regard to quantity and quality, most particularly the latter, as there were a number of superior thorough breeds shown.

* * * * *

And this state of things, showing plainly as it does, that our soil is fertile and highly adapted to almost every variety of produce, combined with the other items of healthy climate, of laws wisely framed and impartially administered, and of a brightening prospect of vastly increased facilities as to travelling and marketing, justify us in representing our County as holding out inducements to emigrants and intending settlers generally, second to none which can honestly be held forth by any other County in the Dominion, or by any section in the unquestionably rich belts of our neighbours across the line.

Our soil is fertile, our climate bracing. The importance rightfully due to railroad enterprises is becoming more and more perceptible, and in all other respects the dry bones are being so healthfully rattled as to promise every bright and prosperous result. This and all similar societies could accomplish grand successes; let us notice one of these, which if compassed, would have a lasting and glorious influence. Our young men RUSH from the farm anywhere and everywhere, so long as they may escape what they are pleased to style the monotonous drudgery of farming. They grasp at situations which give them petty salaries in the towns and cities, while by staying at home and tilling the paternal acres they might gain an honorable competence. Could this not be remedied? Could we not make the eminently honourable occupation of tilling the soil a little more attractive, and by introducing all manner of improvements which our advancing age originates, persuade our young men from preferring a life, which is too often burdened with frivolity and affected refinement, to one of honest toil and independence? This grand object can be in part accomplished by our agricultural societies; let us then encourage them openly and liberally, electing good and sound men to posts of honour in them, and we will then be gratified by seeing that our labours have met with no mean success.

* * * * *

Dun and South Caguga.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		15 88	
" 120 Members' Subscriptions.....		120 00	
" Admissions to Show.....		4 00	
" Legislative Grant.....		73 46	
		<hr/>	213 34
CR.			
By Prizes for Live Stock.....	106 25		
" " Field Products.....	24 00		
" " Dairy ".....	5 25		
" " Horticultural Products.....	5 75		
" " Arts and Manufactures.....	16 75		
" " Ploughing Match.....	13 00		
	<hr/>		
	171 00		
Unpaid.....	17 75		
	<hr/>		
		153 25	
" " of previous year.....		3 75	
" Preparing Show Grounds.....		5 00	
" Working Expenses.....		31 75	
		<hr/>	193 75
Balance in hand.....			19 59

REPORT.

* * * *

The Spring Show was well attended, and the different classes of horses were well represented; but your Directors are sorry they cannot say so much for the second class animals, and they would recommend more interest to be taken in this branch of agriculture, by patronizing thorough bred animals and encouraging importers of the same.

The Fall Exhibition was largely attended, and pronounced by all a decided success in every particular, and equal in many respects, if not superior, to our County Show. The grain was of excellent quality, although not so prolific in yield as former years. Some samples of grain were mixed, which might easily be prevented by care in selecting seed, and would, we have no doubt, amply repay all trouble.

One of the most important labours of your Directors during the past year was the erection of an Agricultural Hall, which was built by voluntary subscriptions; and they would take this opportunity of thanking those who subscribed so liberally for its erection. It is a very commodious building 40x25, and quite equal to the wants of the Society at present.

In regard to future prospects of farmers in these Townships, we see no reason to hope that there will be any increase in the average yield of that great staple production, wheat, until farmers are in a position to underdrain and adopt a more systematic rotation of crops. A mixed system of husbandry seems most applicable to our wants, some branches of which promise remunerative returns. The dairy business promises well, and with an established reputation for a good article, and proper facilities for making a regular market for cheese may be obtained at paying prices. The same may be said of butter, which, in small dairies, will be the ruling article. One great advantage must not be lost sight of, that these operations tend greatly to increase the fertility of the soil, while the opposite will be the result in continually growing cereals.

Rainham.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		35 44	
" 108 Members' Subscriptions.....		108 00	
" Admissions to Show.....		4 60	
" Legislative Grant.....		65 51	
		<hr/>	213 55

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock	84	25				
“ “ Field Products.....	14	75				
“ “ Dairy “	2	50				
“ “ Horticultural Products.....	2	00				
“ “ Agricultural Implements... ..	15	75				
“ “ Arts and Manufactures.....	9	25				
“ “ Ploughing Match.....	8	00				
	—		136	50		
“ “ of previous year.....			1	00		
“ Working Expenses.....			26	05		
			—		163	55
Balance in hand.....					50	00

Seneca, Oneida and N. Cayuga.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			8	98		
“ 209 Members' Subscriptions.....			215	00		
“ Legislative Grant.....			131	63		
“ Municipal Grant			35	00		
			—		390	61
CR.						
By Prizes for Live Stock	240	00				
“ “ Field Products	25	50				
“ “ Dairy “	14	00				
“ “ Horticultural Products	6	00				
“ “ Agricultural Implements.....	33	00				
“ “ Arts and Manufactures	21	00				
	—		339	50		
“ Preparing Show Grounds			6	25		
“ Working Expenses			38	50		
			—		384	25
Balance in hand.....					6	36

Walpole.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			130	12		
“ Members' Subscriptions.....			266	00		
“ Legislative Grant.....			140	00		
			—		536	12
CR.						
By Prizes for Live Stock	239	50				
“ “ Field Products.....	28	25				
“ “ Dairy “	10	50				
“ “ Horticultural Products	4	50				
“ “ Agricultural Implements.....	28	50				
“ “ Arts and Manufactures	48	50				
“ “ Ploughing Match.....	23	00				
“ Discretionary.....	6	00				
	—		388	75		
“ Prize of previous year.....			2	00		
“ Working Expenses			48	60		
			—		439	35
Balance in hand.....					96	77

HALTON.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		44 89	
" 235 Members' Subscriptions.....		244 00	
" Admissions to Show.....		504 00	
" Legislative Grant.....		700 00	
" Municipal Grant.....		100 00	
" Rent of Grounds.....		25 00	
		<u>1,617 89</u>	
Cr.			
By Prizes for Live Stock.....	380 50		
" " Field Products.....	50 25		
" " Dairy ".....	21 00		
" " Horticultural Products.....	37 25		
" " Agricultural Implements.....	76 50		
" " Arts and Manufactures.....	132 50		
" " Ploughing Match.....	21 00		
	<u>719 00</u>		
Unpaid.....	119 50		
		<u>599 50</u>	
" Prizes of previous year.....		53 00	
" L. G. to Township Societies.....		420 00	
" Preparing Show Grounds.....		18 52	
" Purchase of Show Grounds.....		140 00	
" Working Expenses.....		136 77	
		<u>1,367 79</u>	
Balance in hand.....			250 10

Esquising.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		111 91	
" 172 Members' Subscriptions.....		197 00	
" Admissions to Show.....		185 00	
" Legislative Grant.....		79 00	
		<u>572 91</u>	
Cr.			
By Prizes for Live Stock.....	164 75		
" " Field Products.....	39 00		
" " Dairy ".....	8 50		
" Horticultural Products.....	22 00		
" Agricultural Implements.....	12 00		
" Arts and Manufactures.....	44 50		
	<u>290 75</u>		
" Preparing Show Grounds.....		41 00	
" Working Expenses.....		82 10	
		<u>413 85</u>	
Balance in hand....			159 06

Nassageweeya.

Dr.	\$ cts.	\$ cts.	\$ cts.
To 145 Members' Subscriptions.....		185 00	
" Admissions to Show.....		7 00	
" Legislative Grant.....		92 39	
		<u>284 39</u>	

CR.	\$	cts.	\$	cts.	\$	cts.
By Balance due Treasurer.....			5	77		
" Prizes for Live Stock.....	130	25				
" " Field Products.....	32	75				
" " Dairy ".....	19	75				
" " Horticultural Products.....	11	50				
" " Agricultural Implements.....	8	25				
" " Arts and Manufactures.....	16	00				
" " Ploughing Match.....	24	00				
			242	50		
" Working Expenses.....			28	39		
					276	66
Balance in hand.....					7	73

Nelson.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			47	14		
" Members' Subscriptions.....			170	00		
" Admissions to Show.....			32	00		
" Legislative Grant.....			87	64		
" Municipal Grant.....			25	00		
					361	78
CR.						
By Prizes for Live Stock.....	210	25				
" " Field Products.....	37	75				
" " Dairy ".....	16	75				
" " Horticultural Products.....	10	50				
" " Agricultural Implements.....	13	25				
" " Arts and Manufactures.....	25	25				
			313	75		
" Preparing Show Grounds.....			10	00		
" Working Expenses.....			41	03		
					364	78
Balance due Treasurer.....					3	00

Trafalgar.

DR.	\$	cts.	\$	cts.	\$	cts.
To 304 Members' Subscriptions.....			304	00		
" Admissions to Show.....			65	45		
" Legislative Grant.....			160	00		
" Municipal Grant.....			100	00		
" Miscellaneous Receipts.....			44	93		
					674	38
CR.						
By Balance due Treasurer.....			9	15		
" " Prizes for Live Stock.....	288	50				
" " Field Products.....	55	50				
" " Dairy ".....	18	00				
" " Horticultural Products.....	24	25				
" " Agricultural Implements.....	14	50				
" " Arts and Manufactures.....	80	50				
			481	25		
" Working Expenses.....			87	07		
					577	47
Balance in hand.....					96	91

HAMILTON.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			83	87		
“ 200 Members’ Subscriptions.....			282	25		
“ Legislative Grant.....			350	00		
“ Proportion of surplus of Union Exhibition.....			192	73		
					908	85
CR.						
By Cash paid Treasurer of Union Society.....			550	00		
“ Agricultural Publications.....			108	25		
“ Working Expenses.....			100	80		
					759	05
Balance in hand.....					149	80

REPORT.

The Officers and Directors of the City of Hamilton Electoral Division Agricultural Society at the close of their term of office, and in accordance with the requirements of the Act, beg to submit the following:—

In presenting the Treasurer’s statement, the Directors take pleasure in drawing attention to the fact that the balance on hand, amounting to \$149.80 is very much in excess of last year, and they consider this an evidence of increased interest manifested by the public in agricultural exhibitions, as the surplus is altogether derived from the entrance money collected at the gates.

In accordance with a previous custom, the Directors met the Board of the Agricultural Societies of North and South Wentworth, and agreed to hold a joint exhibition in this city on the 12th and 13th of October, amalgamating their funds for that purpose, and the joint Boards appointed Wm. Henderson, Esq., President of the N. W. Agricultural Society, their Chairman, and W. A. Cooley, Esq., Secretary and Treasurer. The receipts and expenditure of the exhibition are contained in Mr. Cooley’s report, which accompanies this.

While the Directors take pleasure in chronicling a financial success as the result of their labours, they cannot but admit that the exhibition was in many respects inferior to former ones. This might be accounted for in part from the fact of so many Township Shows taking place just before it, and partly owing to the liability of prize stock being injured by exposure to the unsettled weather which usually prevails when our exhibitions are held so late in the season, and the Directors consider this a favourable opportunity to draw the attention of their successors to the desire expressed by many members at the late exhibition, to see the same system inaugurated here that has been so successful in London. With superior facilities for exhibition purposes, in the centre of a rich agricultural district, and in the midst of a wealthy community, there appears to be no obstacle to the success of such an undertaking, and no more favourable opportunity than the present to make the effort. On the other hand, if we are to continue our restricted policy of confining our exhibition to residents of the County, and offer no more substantial inducements in our prize list than we have been doing, we will fall so far behind our neighbours that our exhibitions will sink into the comparative insignificance of a township show, and will reflect little credit on those who are entrusted with the management of the agricultural interests of a city which, in all other respects, is acknowledged to have no rival in its enterprise.

The same arrangement that has been in force with regard to agricultural papers was continued this year, and one hundred and fifty-seven copies of the *Canada* and *Ontario Farmer* were furnished to members as desired. The Directors would here remark that they have to regret a falling off in the members’ list, and would suggest to their successors the necessity for increased energy in this important branch of their duties.

HASTINGS, NORTH.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		371 95	
“ 103 Members' Subscriptions.....		105 00	
“ Admissions to Show.....		3 80	
“ Legislative Grant.....		700 00	
CR.			1180 75
By Prizes for Live Stock.....	161 85		
“ “ Field Products.....	78 70		
“ “ Dairy “.....	16 00		
“ “ Horticultural Products.....	5 00		
“ “ Agricultural Implements.....	66 50		
“ “ Arts and Manufactures.....	66 95		
		395 00	
“ L. G. to Township Societies.....		425 00	
“ Agricultural Publications.....		62 50	
“ Working Expenses.....		57 00	
			939 50
Balance in hand.....			241 25

REPORT.

The Directors of North Hastings Agricultural Society beg leave to submit and report that said Exhibition held in the month of October last in Huntingdon was very successful in general. Horses, cattle and sheep were exhibited in great numbers, mostly all grades of good quality. The wheat exhibited being mostly Soule's and Golden Drop winter varieties. Winter wheat is not much sown in North Hastings, it is generally winter killed out. The Spring varieties are Fife, Genesee and Bald Club, the Fife is fast degenerating; the Genesee is not a very prolific yield. Farmers would be glad to find some new and better kind. The potato crop in general was very good. The hay and grain crops were not very good. Cheese factories are fast springing up, and occupying the attention of the farmers of North Hastings and considered a paying business. Grade cattle well cared for are considered good for cheese factories. Farmers are of opinion that to improve their stock they must purchase the different kinds of thorough bred animals at their own expense, one in every neighbourhood, and make reasonable charge for the use of said animals, and not expect the improvement through Agricultural Societies. It would be unreasonable to think of accommodating and satisfying all through such societies. The unremitting attention of the Commissioner of Agriculture and Arts, under the new Act of Parliament, and the attention of the officers connected with the same is considered a great improvement. The different amounts apportioned to the different County Agricultural Societies are always remitted at an early date every year, and considerably in advance of the time of the different exhibitions; and every encouragement given to immigration into the Province of Ontario to all suitable classes of people, both as intending occupants of free grants of land and intending purchasers of land, and as day labourers and hired servants. The Land Drainage Act also passed, affording the farming community an opportunity also of draining their lands, and bringing the same into cultivation on the easiest terms, which is in a great measure due to the unremitting attention of the Commissioner of Public Works.

Dungannon, Faraday, &c.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		14 84	
“ 64 Members' Subscriptions.....		81 50	
“ Admissions to Show.....		4 50	
“ Legislative Grant.....		120 00	
“ Arrears of do. for previous year.....		65 00	
“ Proceeds Sale of Seeds.....		47 02	
			332 86

CR.	\$	cts.	\$	cts.	\$	cts.
By " Prizes for Live Stock.....	88	00				
" " Field Products.....	56	63				
" " Dairy ".....	3	87				
" " Horticultural Products.....	21	00				
" " Arts and Manufactures..	19	05				
			188	55		
" Preparing Show Grounds.....			1	50		
" Purchase of Seed and Expenses.....			61	44		
" Agricultural Publications.....			18	45		
" Working Expenses.....			38	68		
					306	62
Balance in hand.....					26	24

REPORT.

In presenting their annual Report the Directors of the Dungannon and Faraday and United Townships Agricultural Society congratulate the members on the great increase of the Society for the year 1870. The subscription list shows 64 members paying \$81.50 as against 50 members paying \$50 in 1869. Your Directors succeeded in getting the sum of \$65 from the County Society as arrears for 1869. The Society became entitled to \$120 from the County as the share of the Legislative Grant, which was received the beginning of December. These sums, together with a balance in hand of \$14.83½ enabled your Directors to offer a largely increased list of premiums, amounting to \$270 including liberal premiums for the introduction of superior breeds of cattle, sheep and pigs, which, however, were not competed for, except in the case of pigs. There were 199 entries at the annual Exhibition by 35 members, as against 191 entries by 37 members at the exhibition of 1869, and the amount paid in prizes was \$188.55 as against \$101.25 for 1869. The exhibition of the past year was very superior to that of 1869 in roots and vegetables, and in articles of domestic manufacture, in horses, sheep and pigs; but the show of cattle was not quite so good, and in grain and poultry there was a decided falling off. A very handsome boar and sow were exhibited by Mr. Patrick Kavanagh, which were awarded extra special prizes, as were also the same exhibited by Mr. D. Kavanagh. There was also a choice sample of pure Gold Drop fall wheat exhibited and some pure Fife wheat, Poland oats and Norway oats. Your Directors refer with pleasure to a step they took last spring towards the introduction of new and improved grain, seeds and roots, and are glad to learn that the Norway oats and early Rose potatoes have answered every expectation, yielding in some instances from 100 to 114 fold. They also expect great improvement in the hay crop from the introduction of Alsike clover. Your Directors had it in contemplation to offer prizes for standing crops and for the best managed farms, but owing to the great extent of country embraced by the Society it was not considered practicable at present, but your Directors strongly urge their successors to give this their careful consideration, as however valuable the demand created by lumbermen may be—and it is valuable—still it is not permanent and has a great tendency, by causing all the hay, oats and other produce to be sold, to impoverish the land to a very injurious extent. Your Directors would strongly recommend more attention being paid to the raising and fattening of live stock, having in view the probability of the establishment of a cheese factory in this territory, and possibly of a carding mill or woollen factory, as they consider this country well adapted for raising cattle and sheep. And wool is always a profitable article provided a good kind of sheep is introduced. Besides which all the produce of the farm would be consumed on the farm and returned to the land in the shape of manure, thereby enabling the farmers to grow sufficient wheat not only for local demand but for other markets, whereas now a large amount of money is sent out of the neighbourhood every year for the purchase of flour.

Huntingdon.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			68	75		

	\$	cts.	\$	cts.	\$	cts.
To Members' Subscriptions.....			63	00		
" Legislative Grant.			120	00		
					251	75
Balance in hand.....					251	75

NOTE:—This Society held no Exhibition in 1870.

Madoc.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			134	76		
" To members' Subscriptions.			43	00		
" Admissions to Show.....			1	68		
					179	44
CR.						
By Prizes for Live Stock.....	46	50				
" " Field Products	20	50				
" " Dairy "	5	75				
" " Horticultural Products	2	50				
" " Agricultural Implements.....	10	00				
" " Arts and Manufactures.....	5	00				
" " Additional.....	7	00				
			97	25		
" Working Expenses.....			41	55		
					138	80
Balance in hand.....					40	64

Rawdon.

DR.	\$	cts.	\$	cts.	\$	cts.
To 65 Members' Subscriptions			65	00		
" Legislative Grant			120	00		
" Proceeds Sale of Seeds.....			26	13		
					211	13
CR.						
By Balance due Treasurer.....			21	38		
" " Prizes for Live Stock.....	56	75				
" " Field Products.....	26	95				
" " Dairy "	6	00				
" " Horticultural Products.....	6	95				
" " Arts and Manufactures.....	29	25				
			125	90		
" Preparing Show Grounds.....			3	25		
" Purchase of Seeds.....			21	00		
" Working Expenses.....			15	25		
					186	77
Balance in hand.....					24	35

HASTINGS, EAST.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			2	38		
" 144 Members' Subscriptions.			144	00		
" Admissions to Show.....			28	35		

	\$	cts.	\$	cts.	\$	cts.
To Legislative Grant.....			700	00		
“ Subscriptions for Hall.....			56	45		
CR.						931 18
By Prizes for Live Stock.....	212	75				
“ “ Field Products.....	73	52				
“ “ Dairy “.....	9	00				
“ “ Horticultural Products.....	17	05				
“ “ Agricultural Implements.....	54	50				
“ “ Arts and Manufactures.....	54	25				
	421	07				
Unpaid.....	102	00				
			319	07		
“ L. G. to Township Societies.....			280	00		
“ Preparing Show Grounds.....			64	11		
“ Agricultural Publications.....			84	37		
“ Working Expenses.....			75	15		
					822	70
Balance in hand.....					108	48

NOTE.—The Directors report the Society to be in a progressive state, the live stock of the County being, in point of quality, steadily improving. The manufacture of cheese is rapidly increasing, and from this article alone a sum equal to \$100,000 had been realised in the Riding during the past year. The dairy business is second to no other, “and appears to be destined to become permanently the most important business of the agriculturists of Ontario. All we require is to make a good quality. We have made a good commencement, for in the Montreal market during the past season one of our Factory brands was more enquired after than any other in the Province.”

Thurlow.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To 52 Members' Subscriptions.....			57	00		
“ Legislative Grant.....			140	00		
CR.						197 00
By Prizes for Live Stock.....	89	00				
“ “ Field Products.....	18	00				
“ “ Dairy “.....	3	35				
“ “ Horticultural Products.....	2	75				
“ “ Agricultural Implements.....	10	50				
“ “ Arts and Manufactures.....	32	75				
	156	35				
unpaid.....	20	35				
			136	00		
“ Working Expenses.....			19	18		
					155	18
Balance in hand.....					41	82

NOTE :—The Report speaks of the Exhibition as fully equal to previous occasions, and in point of quality in some classes, better.

Tyendinaga.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand.....			20	63		
“ 90 Members' Subscriptions.....			90	00		
“ Legislative Grant.....			140	00		
					250	63

CR.	\$ cts.	\$ cts.	\$ cts.
By Prizes for Live Stock.....	107	70	
" " Field Products.....	39	00	
" " Dairy "	8	25	
" " Horticultural Products.....	7	15	
" " Agricultural Implements.....	14	25	
" " Arts and Manufactures.....	29	10	
	—	205	45
" Preparing Show Grounds.....		4	10
" Working Expenses.....		18	87
		—	228 42
Balance in hand.....			22 21

NOTE:—The Directors state that the Exhibition was successful, and the quality in most departments excellent. In farm buildings great progress has been made during the past few years. They call attention to the importance of sugar beet manufacture, of underdraining, as affording an earlier and safer seed bed, of cleaner and deeper cultivation, and also to the saving of manure, a matter even now too much neglected. The reading of Agricultural papers is likewise strongly recommended to farmers, both as a means of obtaining valuable information, and of strengthening the habit of careful observation and induction.

HASTINGS, WEST.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		102	13
" 242 Members' Subscriptions.....		242	00
" Admissions to Show.....		19	63
" Legislative Grant.....		700	00
" Cheese Factory Subscriptions.....		155	00
" " by K. Graham		50	00
		—	1268 76

CR.	\$ cts.	\$ cts.	\$ cts.
By Prizes for Live Stock.....	271	25	
" " Field Products.....	57	25	
" " Dairy "	13	50	
" " Horticultural Products.....	10	00	
" " Agricultural Implements.....	95	04	
" " Arts and Manufactures	82	50	
	529	54	
Unpaid.....	14	69	
	—	514	85
" " of previous year.....		6	25
" Preparing Show Grounds.....		5	00
" 1st Prize Cheese		50	00
" Agricultural Publications.....		127	20
" Working Expenses.....		131	05
		—	834 35
Balance in hand			434 41

REPORT.

The Directors of the West Hastings Agricultural Society beg leave to report, that it gives them great pleasure to state that the financial position of the Society is in a healthy

state, having had a much larger membership as compared with last year, thus enabling them to draw the full amount of the Government grant, seven hundred dollars, by which means they were able to enlarge and increase the premium list. They confidently hope that the membership for the coming year may be still larger, so as to enable them to offer greater inducements to agriculturists and manufacturers in the future.

They also report a decided improvement in cattle, sheep and swine, and are gratified to see the interest taken by some farmers in improving their stock by the importation of improved breeds during the year, an enterprise which they trust will be emulated by others. The important dairy interest which is springing up in all parts of the Riding renders more attention to the improvement in the quality of cows imperatively necessary, provided our dairymen desire to make this branch of industry more successful, and to enable them to excel in the manufacture of cheese. They have much pleasure in reporting the success of their first cheese show, there having been over one hundred cheeses on exhibition. This bringing into competition of the different manufacturers of cheese in the Province, and the valuable information received relating to the different modes adopted in such factories contained in the reply to the questions submitted, which will hereafter be printed for circulation, cannot but prove of the greatest benefit to those engaged in the manufacture of cheese.

In horses we have some fine animals both for farming purposes and the road.

The attention paid to the manufacture of agricultural implements during the year will enable us to compete successfully with any in the Dominion.

Much improvement is yearly taking place in domestic manufactures, and in the fine arts.

* * * * *

They cannot close their Report without stating that much praise is due to the Provincial Government for the liberal and extensive aid given to agricultural societies.

HURON, NORTH.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			186	29		
“ 223 Members’ Subscriptions.....			224	00		
“ Legislative Grant.....			700	00		
“ Miscellaneous.....			130	50		
					1240	79
CR.						
By Prizes for Live Stock.....	321	00				
“ “ Field Products	96	00				
“ “ Dairy “	24	00				
“ “ Horticultural Products.....	31	00				
“ “ Agricultural Implements.....	34	00				
“ “ Arts and Manufactures	51	00				
	557	00				
Unpaid.....	42	00				
			515	00		
“ Prizes of previous year.....			66	00		
“ L. G. to Township Societies			420	00		
“ Working Expenses.....			168	82		
					1169	82
Balance in hand.....					70	97

REPORT.

The Directors of The North Riding of Huron Agricultural Society have much pleasure in submitting to the Society their third annual report.

The affairs of the Society at the end of its third year of existence are in a flourishing condition, the Spring and Fall Exhibitions having proved successful to such a degree as to com

pare favourably with the shows of many of the older and wealthier counties, where better societies should be maintained and where better stock is supposed to be raised.

And notwithstanding that our Riding is still comparatively in its infancy, your Directors have much pleasure in noting the continued prosperity of the Riding in the quality of the stock raised, and the quantity and excellence of the labour saving machinery manufactured within its limits.

They have also much pleasure in adverting to the numerous manufactories which are rearing their young heads in our midst and bespeak for them the same success in their respective departments that has attended the humble efforts of your Society.

The two former Fall Exhibitions of this Society were held on one day each; this year your Directors decided upon trying the two days system, and after comparing the results are of the opinion that the latter is in many respects preferable; it being impossible to get through the many duties connected with an Exhibition, of the proportion of that held at Clinton last year, in one day, with any degree of satisfaction, either to exhibitors, visitors, or to the Society itself.

Your Directors regret to notice the comparative failure of the crops (more especially Fall wheat), during the past season, and also regret that more interest is not manifested in the grain shows of the Society, as they consider it of the utmost importance to the farmer that his seed grain should be of the best quality, fresh and pure.

There is another subject which, although apparently unconnected with agriculture, yet in the opinion of your Directors exercises a very important bearing upon it, namely *education*. Too many farmers of our country seem to consider that education is not required to enable their sons to become good husbandmen, and their daughters intelligent wives and mothers. This your Directors feel to be a great mistake, education being just as essential to make good husbandmen as it is to make good artificers, merchants or professional men. Educate your sons and daughters, and do not fail to impress upon them the dignity and nobility of labour, as by so doing you place them in the right road to the highest social and public positions in the country

* * * * *

ANNUAL DINNER.

The usual dinner of the members and friends of the North Huron Agricultural Society was held at Clinton, February 28th, 1871, and was, as on former occasions, numerously attended. Mr. John Snell, Jr., of Edmondton, delivered the following excellent address:

“It affords me a great amount of pleasure to meet with the members of the North Huron Agricultural Society on this interesting occasion. I had several times purposed attending one of these meetings in past years, but circumstances always prevented. Yours is the only Society I know that has adopted this system of an annual dinner, and I have always thought it was a good idea, and have tried to persuade our Society to adopt the same plan but without success. It is customary with most of our Agricultural Societies to have a dinner on the day of the annual exhibition, but then every exhibitor is busy with his own affairs, and many cannot make it convenient to attend, no matter how desirous they may be, but here you have your meeting in the quiet of a winter evening, when you have time to enjoy it, and you can by the discussion of questions relating to your pursuit make it instructive and profitable, as well as interesting. One of the beauties of our Agricultural Societies when properly conducted is, that they afford a field where men of all parties and persuasions can meet on common ground, where political and sectarian differences are lost sight of for the time, and all may and should work together harmoniously for the common good. ‘Here none are for a party, but all are for the State,—here the rich man helps the poor, and the poor man helps the great.’ I must say before proceeding with my subject that I have a very high regard for the people of this section, the sterling, honest yeomanry of this County of Huron. Having been personally acquainted with many of your farmers before they came to this County, and knowing how little many of them had to start in the world with,—how with very little but strong hands and willing hearts they have hewn out for themselves and their families comfortable homes, where but a few years ago was a dense forest. All honour I say to the men who by honest industry while helping themselves have also helped their country. My own opinion is, that there is no section of this Province that has made more rapid strides in the direction of improvement than the County of Huron, and

especially this town of Clinton. I am only a young man, sir, but I can remember very distinctly, and it seems but a few years ago when I used to hear parties who had been in here in search of bush-farms, talk about Rattenbury's Corner, and I always fancied, and I suppose my imagination was not far wrong, that it was a common crossing where stood an old log tavern and a few small houses. If one of us, sir, had gone asleep 15 or 20 years ago (like Rip Van Winkle), and waked up to-day it would be hard to persuade us that this was the site of Rattenbury's Corners. But I must confine myself to the subject given me, viz.: Stock and Stock Raising. In a new settlement where clearing land is the order of the day, little attention is given to stock raising. Grain growing is then the farmer's forte, and it is the readiest means he has of securing a return for his labour and of paying for his land, and meeting the expenses of clearing. Then he has a virgin soil to work upon, a soil rich with decayed vegetable matter, and which is almost certain to give him good crops. A soil of which it has been said that it is only necessary to "tickle it with a harrow and it will laugh with a harvest." But it is reasonable to suppose, and experience has proved it, that continuous cropping will tend to exhaust the best soil, and take from it the elements that go to make up a good field of grain, and that it will eventually lead to serious disappointment and disaster if a system of continuous cropping is persisted in without giving back to the soil in the shape of manures and fertilizers the elements that have been extracted from it. It is here, then, that the importance of stock raising is apparent. Not mind you, not when the soil has become exhausted, would I recommend you to give attention to stock stock raising, but before you arrive at that crisis, while your land is yet in good heart cherish and protect it as one of your best friends. It is a mistake that the majority of the farmers in our older settlements have fallen into, that of continuous cropping without making an adequate return to the soil, and the consequence is, that they are poorer to-day than they were 10 or 15 years ago. They were too timid and short-sighted; they lacked the energy and enterprise to leave the old beaten paths, and to launch out into the newer and better ways of an enlightened Agriculture; and they work and dig and delve for a scanty return, and the consequence is, that deeply mortgaged farms are the rule and not the exception. I sincerely hope, sir, that the farmers of Huron will avoid the error into which those of the older settlements have fallen; and while their farms are yet comparatively new and fertile, they will adopt a system of mixed farming. Cultivate roots extensively, sow clover liberally, rest their lands, raise and feed stock to make manure, to consume the produce of the farm, or a large proportion of it; and instead of the toilsome work of teaming all their produce to market, manage it so that the greater part of that produce may carry itself to market, (walking away) in the shape of good beef, mutton and pork. There can be no question that the most direct and economical way of keeping up the fertility of our farms is, by increasing the number of acres of grass and roots, and diminishing the number of acres of grain—in other words by more and better stock, and less grain, and after all I would not say that the result would be less grain. The acres in grain would be fewer, but the gross product would be much larger, while we should have more beef, mutton and pork, and of better quality. Our motto should be "more grass and roots, more stock, more manure, better crops." Well then if it is wise to raise and feed stock, I wish to urge upon your attention the importance and the wisdom of raising and feeding good stock, such as will give you the best return for the food they eat, and the care they get; and I think that any one that has had any experience in the matter will agree with me, that the improved breeds of stock will take on flesh faster and make a great deal better return for their feed and care than common stock will or can. I don't wish to be understood as urging or insisting that every farmer should keep a thorough-bred herd and flocks; that is not practicable,—breeding is a business or a profession of itself; and as Thos. Bates, the veteran short-horn breeder once said, and with entire truth "there are twenty men fit to be Premier for one that is fit to be a breeder." But I do urge that every farmer who breeds and raises cattle, sheep or pigs, ought to have the use of thorough-bred males, and to use no other if he can get them, or the use of them within the bounds of a reasonable price; because it is in this way only that he can cheaply raise animals which will give the largest return for the food they get. I have no hesitation in saying that if the object be only to raise steers to feed for beef, it will pay well to give an extra price for the use of a pure-bred bull; for I believe that grade Durham steers will sell for as much money at two years old as common stock will at four years, on the same kind of feed and care and under precisely similar circumstances, and if fed till they are four

years old will sell for double as much. They not only feed better and make greater weights in a given time, on a given amount of food, but their general appearance is so much finer and more attractive that they take the eye of the butcher and the epicure, and will sell for the highest price. I have heard shrewd butchers say that if a man were only raising calves for veal, it would pay him to give an extra price for the services of a pure bred bull, the calves would fatten so much faster.

One of the great hindrances to the introduction of improved stock in this County is the absurd notion still entertained by a large portion of our farmers, that the improved breeds are tender, and impart delicacy to cross bred stock. Now I am satisfied that there is no truth in this, no grounds for it. I contend that the whole physical structure of a short-horn denotes strength of constitution. A man with a broad chest is regarded as a healthy subject, a man of a strong constitution, and surely the broad expansive chest of a short-horn indicates a stronger constitution than the narrow, contracted organization of a common Canadian cow. I do not despise our good old Canadian cows; many of them do splendid service as milkers, and they are just the right kind of a foundation to commence to breed good grades from, for then you may combine their milking qualities with a larger frame, and better feeding qualities. We do not claim that the short-horn cows as a class are as good milkers as the common cows; but we claim that many of them are first-class milkers, and everybody knows that many of our common cows are very inferior milkers. You need not expect to combine the very best milking capacities with the very best fattening qualities; but you may combine very fair milking qualities with very good feeding qualities. With regard to the improved breeds being tender I must say that I entirely dissent from the notion. I know they will stand as much hardship as common stock—they will do as well on the hardest fare. I have seen thorough-bred cattle wintered in the open barnyard on straw alone, and have seen them come out in better condition than common stock in the same yard, and with the same feed; but, sir, I have no desire to test their powers of enduring starvation. There is no necessity for starving animals in this land of plenty, and it is bad policy to do so. If a thing is worth feeding at all, it is worth feeding well, and it is just here that the improved breeds have the advantage—feed them both well, or moderately well, and you will find that the high bred stock will show a vastly better return. I would not have you understand that by feeding well I mean that system of pampering and forcing, that some of our prominent breeders and exhibitors practice. That system does not pay, in fact it is a ruinous system, both to the animals and their owners, and these men know it from bitter experience. It is money and only money to put a breeding animal in such uncomfortably high condition as our show animals are put in, and it is all in vain to expect them to do well as breeders. Once in a while there is an animal with a constitution strong enough to endure it and succeed as a breeder in spite of adverse circumstances; but too often it leads to barrenness, abortion and impotency. But ambition drives men to do what their better judgment tells them is wrong; and popular opinion flatters the man that can pile on the most beef. If one feeds high, another must do the same to keep pace with him, and it is impossible to get judges who will make an allowance for difference in condition; nor can any standard of condition be fixed by which it can be said thus far, and no further. What I mean by feeding stock well is, to keep them just in good, healthy growing condition, without being fat. It is better for the health of the animal to feed thus. He will make just as good an animal at maturity, and it is very much safer, and more profitable for the farmer.

The great secret of success in breeding stock is in the selection of the best male animals, and this is a subject of great importance and interest to all farmers. Sir, I have so great faith in the value of pure-bred sires that I feel certain that the value of stock in this Dominion could by their agency be doubled in less than five years. If it were practicable that every man that raises stock of any kind could and would secure the services of pure-bred male animals, the improvement that would be made in the stock and in their value in five years would double the estimated value of stock in this country, and add just that much to the wealth of the nation.

The first cross of a pure-bred male upon common stock shows a wonderful improvement in the offspring, a greater improvement than is apparent in subsequent crosses. It does not follow that a corresponding improvement in the offspring will be seen in each successive cross, in proportion to the amount of pure blood imparted, on the contrary one cross may exhibit a great advance, and the next an unexpected falling off. The defects of a remote ancestor

will occasionally appear, after having remained latent for several generations, but in the aggregate, by employing only pure-bred males of the best character and known to be descended from ancestors combining the most valuable qualities of the race, progressive improvement will be obtained. Some people though pleased and gratified with the first cross, yet because the second cross does not show the same proportion of improvement get disappointed and dissatisfied, give up using pure-bred sires and go back to grades because it is cheaper. Now, this is a great mistake. It is a retrograde movement, breaks the chain of improvement and puts them back for years. We should be careful after obtaining one cross of a pure-bred never to go back to a grade, better to breed to a very inferior animal if his blood is pure than to a grade of the finest appearance. We must learn that blood in a breeding animal is even of more consequence than his physical structure, for the blood of a grade bull is a mixture of the blood of various distinct breeds of cattle. They are mongrels or hybrids, hence, they are uncertain, unreliable breeders in the greater number of instances failing to impress their good qualities they may *happen* to have upon their offspring, and almost always propagating *all* their *bad* ones. The same remarks to a great extent hold good in regard to crossing the different distinct breeds of pure-bred stock. I know several farmers in our own County who ten years ago had good flocks of Leicester Sheep, but when the Cotswolds were introduced into this country they imagined that they could improve their Leicesters by crossing them with Cotswold Rams, well, the result of the first cross was satisfactory. They were greatly pleased and fancied they were about to inaugurate a *new era* in sheep breeding, and to enlighten their neighbours, so good was their first cross that they thought some of the young rams would do to breed from just as well as pure-bred ones, and then it was so much cheaper you know, to raise one's own rams; well the consequence is that now after 10 years of wasted effort those men have not a sheep fit to take to a Township Show, have not half as good flocks as they had 10 years ago. These men made a mistake in the first place in crossing their sheep at all, better they had kept their Leicesters pure and used only rams nearly like the desired type as they could get, and the second mistake they made was not in continuing to use *pure-bred* Cotswold Rams, they might then in a long time have made a flock of sheep that would have bred with at least tolerable certainty to the Cotswold type. But this subject of breeding is one that presents a wide field for study and thought, and cannot be fully treated in a brief address like this even if we had the ability to handle it properly.

I have hesitated about giving an opinion as to the comparative merits of the different breeds of stock, and their claims upon the people of this country because I have felt that my remarks might be thought to savour of self-interest, but I am sure you will not take all I say as law and gospel if it does not meet the approval of your own judgment. As far as the different breeds of cattle are concerned, I think it is generally acknowledged by disinterested parties that for general purposes, that is, combining beef and milk the short-horns are the best adapted to the wants of the people, and it is certain that for crossing with our common stock, the Short Horn Bulls are the most useful. The good grade cattle of the country settle that point conclusively. There will always be a good demand for short-horned bulls, to use in crossing the common stock. If I were going into a dairy business and expected to make a living out of cheese and butter exclusively, I should certainly favour the Ayrshire, but when you want to turn them to beef they are small, and cannot make much weight, and they all come to beef at last. If beef alone were desired, and milk was no object, I doubt not the Herefords would stand high as feeders, but what we want is to improve the general stock of the country. With regard to sheep, the long-wooled breeds, Leicester and Cotswold are allowed on all hands to be best adapted to this country as producing the greatest weight of wool and mutton. Their merits are very nearly balanced, the Leicester are perhaps easier fed and mature earlier. The Cotswold make heavier weights at a later maturity and perhaps average heavier fleeces. There is a great difference of opinion as to the merits of the different breeds of pigs, and while I fully respect the opinions of those who differ from me, I must say that after a fair experience with most of the distinct breeds of pigs I must give my opinion in favour of the Berkshires as being easily fed, quiet, mature early, and being capable of being fattened at any age, and attaining large enough weights for all practical purposes. They can be made to dress 500 lbs. without any great effort, and I think that weight ought to satisfy us.

I give no opinion as to the different breeds of horses, simply because I have not given my attention to that branch of breeding, and am no judge of a horse; but I may say, I

highly appreciate that noble animal, and honour the men who have risked so much in the importation of good horses. I think the Fishers, the Masons, the Beatties, Ferris', Thomsons, Sandersons, Cheynes and others, who have so well attended to that interest, deserve the thanks of the people of this country.

I find that a good many of our people are putting off the time of commencing to improve their stock, with the idea that after a few years thorough-bred stock will be cheaper and more easily obtained. Now, I think this is a mistaken notion, I don't expect to see them cheaper in my lifetime. They are no cheaper now than they were fifty years ago; indeed, they never were as high as at the present time. How is it, in England, the home of our pure bred stock? Are not prices higher there than ever in the history of the country? The demand for stock is continually increasing, and will continue to increase. The more they are known the more they will be appreciated, and the more in demand. There are comparatively few in this country; in our own old County of Peel not more than half a dozen farmers own a pure bred short-horn, and not more than three farmers have half a dozen. The vast extent of country embraced in the Western States and Territories is being fast brought under cultivation, and must be supplied with good stock, for they know the value of it; and then our illimitable North-west Territories will gradually be opened up and brought under cultivation, and will in time demand our surplus stock. We have a vast country to fill up with good stock, a work that a century will fail to accomplish.

Our people have yet to see and acknowledge the claims of pure bred stock; they stand in their own light; and too many of them entertain ungenerous suspicions of the motives of the men who have risked so much in the enterprise of introducing such stock into this country. I think, sir, the time will come when our people will be more free to acknowledge the good services which our breeders and importers have done for the country; it will yet be acknowledged that they have done more for the country than the country has done for them.

I regard stock raising and breeding as the most interesting and pleasant department of farming; indeed, I fancy the profession would be very dull, and have comparatively little interest for me, if it were not for the pleasure I derive from watching the growth and development of young animals; and, sir, I have often thought that this might supply a complete answer to the oft-repeated question—"What shall we do to keep the boys on the farm?" We all know the tendency there is amongst farmers' sons to go into clerkships or the learned professions. The great reason of this is that farming is not made interesting to them. It is all dull and dreary, they are kept digging and chopping, and ploughing, and dragging year in and year out, without change or variety; and they get the idea that it is more respectable and dignified to wear a good coat and measure tape and count buttons behind the counter. But it is very different where there is a good herd of cattle, a nice flock of sheep, and a few fancy pigs for the boys to take care of. Let the boys feed them, and show them at the fairs; and let them keep the books of the farm, the pedigrees of the stock, the records of births and breeding, and you will be surprised at the interest they will manifest in it; and, in addition to this, supply them with good agricultural papers and other good reading matter, to make home pleasant and the business interesting.

In conclusion, let me say that our Agricultural Societies have a great work to do in encouraging and promoting the introduction of good stock. They have been instrumental in doing much good in this way; they have stimulated competition, and led people to enquire for the best things; have been the means of bringing our farmers together, where they have been mutually benefitted and instructed. I verily believe if it had not been for our Agricultural Societies we should not have made half the progress we have made in introducing good stock; but there is much yet to be done. Let our Agricultural Societies feel that it is their peculiar mission to encourage and promote this enterprise; let a large proportion of your prizes be given to this department, and the prizes varied to suit the value of the animals to which prizes are offered. In these local societies, especially, encouragement should be given to young breeders, and prizes given for the best animal or herd bred by the exhibitor, and thus encourage taste and skill in breeding; give good prizes and plenty of them, to grade females, sired by thorough-bred males; but *never* offer premiums for grade males—let those go to the shambles.

I have strong hopes, sir, for the Agricultural future of our country. Our future greatness must depend upon our farming; for we are essentially an agricultural people. Let us be true to ourselves and true to our soil—rise to the proper dignity of our calling, and do

our duty—and we shall yet see our calling more generally respected ; and it will yet be admitted that he who by good judgment and skill succeeds in making two blades of grass grow where one formerly grew, and he who by skill and judgment improves the breeds of cattle, is just as much a benefactor to his country as he who manages the affairs of State and directs her political destinies.

Ashfield and West Wawanosh.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			52	93		
“ 105 Members' Subscriptions.....			107	25		
“ Admissions to Show			34	70		
“ Legislative Grant.....			72	98		
					267	86

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock.....	87	25				
“ “ Field Products.....	16	00				
“ “ Dairy “	10	75				
“ “ Horticultural Products.....	22	00				
“ “ Arts and Manufactures.....	34	25				
			170	25		
“ Prize of previous year.....			1	75		
“ Preparing Show Ground.....			3	50		
“ Working Expenses.....			12	97		
					188	47
Balance in hand.....					79	39

Grey.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.			92	90		
“ 69 Members' Subscriptions.....			69	50		
“ Admissions to Show.....			47	45		
“ Legislative Grant			39	46		
					249	31

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock	109	00				
“ “ Field Products.....	15	50				
“ “ Dairy “	11	50				
“ “ Horticultural Products.....	3	50				
“ “ Agricultural Implements	6	00				
“ “ Arts and Manufactures	14	25				
“ “ Ploughing Match.....	38	00				
	197	75				
Unpaid.....			58	50		
					139	25
“ Prizes of previous year.....			25	00		
“ Preparing Show Grounds			7	90		
“ Working Expenses			24	29		
					196	44
Balance in hand.....					52	87

Howick.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			1	80		
“ 106 Members' Subscriptions.....			106	00		
“ Admissions to Show.....			13	50		

	\$	cts.	\$	cts.	\$	cts.
To Legislative Grant.....			78	94		
“ Proceeds Sale of Seeds.....			3	35		
CR.					203	59
By Prizes for Live Stock.....	78	75				
“ “ Field Products.....	27	20				
“ “ Dairy “.....	7	00				
“ “ Horticultural Products.....	4	20				
“ “ Agricultural Implements.....	23	00				
“ “ Arts and Manufactures.....	26	40				
			166	55		
“ Working Expenses.....			56	51		
					223	06
Balance due Treasurer.....					19	47

Hullett.

NOTE.—This Society had 52 members, subscribing \$52. It united with the Electoral Division Society in holding a Fall Show.

Turnbury.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Members' Subscriptions.....			102	00		
“ Legislative Grant.....			83	82		
CR.					185	82
By Prizes for Live Stock.....	74	10				
“ “ Field Products.....	25	00				
“ “ Dairy “.....	9	75				
“ “ Horticultural Products.....	5	30				
“ “ Arts and Manufactures.....	38	35				
			152	50		
“ Preparing Show Grounds.....			4	00		
“ Working Expenses.....			15	25		
					171	75
Balance in hand.....					14	07

Wawanosh.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To 79 Members' Subscriptions.....			79	00		
“ Legislative Grant.....			57	34		
“ Subscriptions to Building.....			80	30		
CR.					216	64
By Prizes for Live Stock.....	61	50				
“ “ Field Products.....	21	00				
“ “ Dairy “.....	5	00				
“ “ Horticultural Products.....	4	25				
“ “ Agricultural Implements.....	9	50				
“ “ Arts and Manufactures.....	12	37				
“ “ Ploughing Match.....	9	00				
			122	62		
“ Preparing Show Grounds.....			75	25		
“ Working Expenses.....			9	40		
					207	27
Balance in hand.....					9	37

HURON, SOUTH.

DR.	\$	cts.	\$	cts.	\$	cts.
To 136 Members' Subscriptions.....			136	00		
“ Legislative Grant.....			700	00		
“ Contributions and Donations.....			518	75		
“ Proceeds Sale of Seeds.....			2	00		
CR.					1356	75
By Prizes for Live Stock.....	287	25				
“ “ Field Products.....	75	75				
“ “ Dairy “.....	13	00				
“ “ Horticultural Products.....	27	50				
“ “ Agricultural Implements.....	22	00				
“ “ Arts and Manufactures.....	44	50				
“ “ Ploughing Match.....	247	00				
			717	00		
“ L. G. to Township Societies			411	63		
“ Working Expenses.....			181	13		
					1309	76
Balance in hand.....					46	99

NOTE:—The Society is in a satisfactory condition. At the ploughing match in October 30 ploughmen competed, and the work, on the whole, was exceedingly well done; \$247 were devoted to this object, \$101 in cash and the remainder in agricultural implements presented to the Society, viz.: 2 ploughs, a cultivator, and a reaping machine, presented by Mr. Massey, of Newcastle. Cheese factories are increasing, and the tendency of the times is to go more into dairying and stock raising and less dependence on the wheat crop. In this way it is believed that agriculture will advance with greater certainty and become more profitable.

Hay.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance on hand.....			42	67		
“ 96 Members' Subscriptions.....			100	75		
“ Admission to Show.....			26	80		
“ Legislative Grant.....			61	79		
“ Proceeds Sale of Seeds.....			2	24		
					234	25
CR.						
By Prizes for Live Stock.....	88	00				
“ “ Field Products.....	19	75				
“ “ Dairy.....	6	75				
“ “ Horticultural Products.....	10	00				
“ “ Arts and Manufactures.....	20	55				
	145	05				
Unpaid.....	20	00				
			125	05		
“ “ Prizes of Previous year.....			20	00		
“ Preparing Show Grounds.....			19	08		
“ Working Expenses.....			19	05		
					183	18
Balanac in hand.....					51	07

Stanley.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			57	18		
“ Members' Subscriptions.....			62	00		

	\$	cts.	\$	cts.	\$	cts.
To Admissions to Show			38	00		
“ Legislative Grant			43	62		
“ Miscellaneous Receipts			27	07		
					227	87
CR.						
By Prizes for Live Stock	55	00				
“ “ Field Products.....	14	00				
“ “ Dairy.....	4	50				
“ “ Horticultural Products	5	75				
“ “ Agricultural Implements.....	13	00				
“ “ Arts and Manufactures	21	00				
“ “ Ploughing Match	13	00				
			126	25		
“ Preparing Show Grounds—(incidentals)			22	94		
“ Working Expenses			30	00		
					179	19
Balance in hand					48	68

Stephen.

NOTE.—The Returns of this Society are incomplete as to details. One hundred and fifty-five members are reported as subscribing \$155, which, with the Legislative Grant of \$93 85c., and other items, make the total receipts \$400 35c. Expenditure, \$332 19c., leaving a balance in the hands of the Treasurer of \$68 16c.

Tuckersmith.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand.....			3	70		
“ 291 Members' Subscriptions.....			299	50		
“ Admissions to Show.....			270	00		
“ Legislative Grant.....			140	00		
“ Municipal Grant.....			5	00		
“ Proceeds Sale of Seeds.....			4	45		
“ Miscellaneous Receipts.....			63	25		
					785	90
CR.						
By Prizes for Live Stock.....	164	25				
“ “ Field Products.....	82	25				
“ “ Dairy “	12	50				
“ “ Horticultural Products.....	18	50				
“ “ Agricultural Implements.....	24	50				
“ “ Arts and Manufactures.....	52	00				
“ “ Growing Crops.....	26	00				
“ “ Ploughing Match.....	14	00				
			394	00		
“ Purchase of Grounds			163	00		
“ Preparing Show Grounds			116	50		
“ Working Expenses			112	40		
					785	90

Goderich Horticultural Society.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand.....			37	13		
“ 105 Members' Subscriptions.....			126	10		
“ Admissions to Show			39	23		

	\$	cts.	\$	cts.	\$	cts.
To Legislative Grant.....			72	37		
“ Miscellaneous Receipts.....			00	75		
					275	58
CR.						
By Prizes for Fruits	51	75				
“ “ Flowers and Plants	27	75				
“ “ Vegetables	45	50				
“ “ Arts and Ladies Work	15	50				
			140	50		
“ Preparing for Show			13	88		
“ Horticultural Publications			18	75		
“ Working Expenses			40	09		
					213	22
Balance in hand..					62	36

REPORT.

The Society has held twelve meetings during the year. The discussions held were principally upon questions relating to the best soil and best mode of cultivating garden vegetables. The Society has added this year ten volumes upon Horticulture to their Library, which with those previously purchased form a handsome and useful little library. The books are distributed monthly to the members, and no doubt with the best results, as it encourages a taste for Horticultural pursuits. The annual Exhibition was held upon the 14th September last, and was in every respect a success. We had seventy-seven entries more than we had the year previous. There was an excellent display of apples and considerable competition for the premiums, even when the large number of twenty varieties were required to be exhibited.

The show of pears was also very good, that of plums was not so good or large as at former Exhibitions, owing to the unusually early season, most of the varieties having ripened some time before the Exhibition. The show of peaches was very indifferent both in quantity and quality. Most of the peach trees in this neighbourhood were destroyed last season by the winter setting in before the young wood was matured. The display of grapes was very good indeed, (all grown in the open air) but rather limited in quantity. All the varieties ripened well this season. Garden vegetables both in quantity and quality were all that could be desired. The show of flowers was very good and large, there being a great number of competitors. This branch of the Exhibition was very much admired by the visitors. There was also a great improvement this year in the Ladies' Department, there being a considerable addition to the number of exhibitors.

KENT.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand.....			96	68		
“ 208 Members' Subscriptions			346	53		
“ Admissions to Show			331	44		
“ Legislative Grant.....			700	00		
“ Municipal Grant.....			205	00		
“ Proceeds of Sale of Seeds.....			57	65		
“ Miscellaneous Receipts.....			76	75		
					1814	05
CR.						
By Prizes for Live Stock....	326	00				
“ “ Field Products.....	43	00				
“ “ Dairy “	17	00				
“ “ Horticultural Products.....	25	50				

	\$	cts.	\$	cts.	\$	cts.
By Prizes for Agricultural Implements	110	00				
" " Arts and Manufactures.....	211	50				
" " Ploughing Match.....	61	00				
					794	00
" L. G. to Township Societies.....					420	00
" Purchase of Seeds					101	48
" Working Expenses.....					378	03
						1693 54
Balance in hand.....					120	51

REPORT.

Your Directors are happy to report that it having been determined to make an appeal for aid to the inhabitants of the Town of Chatham with a view of getting up a two days Fair, that it was responded to in the most liberal manner by them, more than \$230 in cash having been subscribed, besides \$117 given in goods as prizes. The consequence was, the best Exhibition, as a whole, was made that has ever taken place since the commencement of the Society. The number of subscribers was raised to 218, and the prize list contained upwards of \$1,000 in prizes. Your directors trust that continued efforts will be made to maintain the position gained last year. As will be seen by the financial statement, the result in a money point of view was very encouraging.

Forseeing that it would be necessary to have more convenient buildings for the use of the Exhibition, if the programme of a two days' Fair were carried out, your directors, through the member of the House of Commons, Rufus Stephenson, Esq., applied to Government to be allowed the use of the barrack grounds and buildings. They are happy to say that in consequence of his exertions a lease is promised of the same at the nominal rent of five dollars per annum.

Your directors have to congratulate the County upon the very important improvement that has been made in the navigation of the river Thames, there being now ten feet of water over the bar when the Lake is at the lowest. As this will have a tendency to lower freights, by doing away with the delays and expense of lighterage over the bar, your directors look upon it as an improvement of the greatest importance to the farming community of this district, as everything that lowers the expense of getting the farmer's produce to market enhances the price to the producer.

There is another very important improvement now in agitation by the County Council, and that is the gravelling of the different County roads. Your directors trust this idea will be carried out, as good roads are a great want in this County, and that body could not well confer a greater boon than by giving them. Your directors trust if the plan proposed should not be considered feasible that the idea will not be allowed to drop, but that some other means will be adopted to gravel the roads. If they should be obtained there are few districts that would then have superior means of locomotion to this, having as it has, a good railway; and with the improvement of the river Thames superior water communication.

A car load of spring wheat and peas was purchased last spring for the use of the members. The spring wheat did not sell very well, but the peas met with a ready sale. Your directors suggest that more attention should be given to the purchase of stock instead of giving the whole of the funds of the Society away in premiums.

The ploughing match was very good, the work being superior. There were seventeen ploughs on the ground. It took place on the farm of Capt. Johnson, who gave a most hospitable reception to all.

The first propellor ever built on this river is now being constructed here; she is as large in size as the Welland canal can take.

Chatham.

Dr.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....					37	95
" 143 Members' Subscriptions.....					187	00

	\$	cts.	\$	cts.	\$	cts.
To Legislative Grant.....			130	85		
“ Miscellaneous Receipts.....			4	80		
					360	60
CR.						
By Prizes for Live Stock.....	86	25				
“ “ Field Products.....	19	85				
“ “ Dairy “.....	12	80				
“ “ Horticultural Products.....	9	40				
“ “ Agricultural Implements.....	11	50				
“ “ Arts and Manufactures	27	65				
			167	45		
“ Preparing Show Grounds.....			8	25		
“ Working Expenses			38	69		
“ Agricultural Publications.....			51	84		
					266	23
Balance in hand					94	37

NOTE.—The Society is increasing in membership and usefulness. The Directors urge as a matter of the utmost importance “the purchase of grounds and the erection of suitable buildings for exhibition purposes.” It is also recommended that “those in the Townships of Sombra and Dover interested in the formation of those Townships into a Union Society with this, to attend the annual meeting, believing that such a union would materially advance the agricultural interests of the respective townships.”

Harwich.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand			127	77		
“ 164 Members' Subscriptions			164	00		
“ Admissions to Show			7	50		
“ Legislative Grant			124	47		
“ Proceeds of Live Stock.....			146	18		
“ “ Sale of Seeds.....			119	41		
“ Loaned			210	00		
“ Notes for Grain and Stock, collected.....			608	47		
					1507	80
CR.						
By Prizes for Live Stock.....	96	75				
“ “ Field Products.....	23	75				
“ “ Dairy “	9	00				
“ “ Horticultural Products.....	4	00				
“ “ Agricultural Implements.....	9	50				
“ “ Arts and Manufactures.....	22	00				
“ “ Ploughing Match.....	35	00				
			200	00		
Unpaid			34	50		
					165	50
“ “ of previous year.....			21	00		
“ Purchase of Live Stock			536	61		
“ “ Seed.....			461	62		
“ Paid on account of Loan and Interest.....			243	13		
“ Working Expenses.....			61	35		
					1489	21
Balance in hand.....					18	59

NOTE.—The Society has been successful in importing Live Stock and Seeds, involving a loss of only \$45 on these transactions. The Exhibition was good both as to amount and quality. The introduction of superior kinds of grain, as well as better cultivation, are essential conditions of agricultural progress. "Your Board feel truly gratified at the evident advance made by the Society in public favour, the gradual increase of members, the growing magnitude of our transactions in stock and grain, and the beneficial influence exerted outside of the Society show that the farmers of Harwich are wide awake to their best interests."

Raleigh.

DR.	\$ cts.	\$ cts.	\$ cts.
To balance in hand.....		92 22	
" 109 Members' Subscriptions.....		111 00	
" Legislative Grant.....		81 21	
" Proceeds Sale of Seeds.....		600 61	
" Cash loaned to purchase seed grain.....		150 00	
			1035 04
CR.			
By Prizes for Live Stock.....	112 62		
" " Field Products.....	16 00		
" " Dairy ".....	6 75		
" " Horticultural Products.....	10 09		
" " Agricultural Implements.....	3 00		
" " Arts and Manufactures.....	15 95		
		164 41	
" Preparing Show Grounds.....		2 30	
" Purchase of Seeds.....		641 40	
" Paid on Loans.....		145 90	
" Working Expenses.....		67 72	
			1021 73
			Balance in hand..... 13 31

REPORT.

The Directors would report that the Society, though nothing to boast of, is in a sound and healthy condition, with a large amount of notes taken for seed grain, given by good farmers, and drawing twelve per cent. interest. The Society had an addition of seventeen members over last year, which shows progress. A large quantity of seed grain has been purchased and sold to members only, at a small profit. Six months were given for the payment of the same, which afforded a great boon to many of the purchasers to get seed with which to sow their lands.

Some additions have been made to our stock. Several thorough-bred Durhams have been introduced into our Township, and also some Galloways. Of sheep and pigs, we think we can boast of some very fine stock, many of which would be a credit to any first-class breeder.

The Annual Show was about as usual; not over one third of the members exhibiting, which left the prizes to be carried off by a few. This is wrong, as we would like to see all take a part. If a man has not a good horse, a fine bull, or some first-class sheep, he can always bring something and so add to the exhibition, and divide the prizes, which would be an encouragement for others to come in and take a part.

The season has been rather unfavourable for the Agriculturist. Extremes of wet, followed by long drought, have been the order of Providence, which has been a great drawback. The harvest has been a scene of toil and loss on account of the heavy and continued rains which destroyed a large quantity of the spring crop altogether, and damaged most of the barley so that it is only fit for feed.

* * * *

Of roots we can say but little, as this Township has never gone much into these crops. We would strongly recommend farmers to turn their attention more to this department.

We are at a loss to know what to suggest for the Society to undertake the ensuing year, to encourage members to continue their subscriptions and induce others to come in. The almost utter failure of the pea crop, on account of the extreme wet, will be a drawback against bringing on more this season; yet we believe it is the only kind of seed that can be brought on to sell profitably, as almost all other kinds of grain are abundant and cheap.

Tilbury, East.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		3 36	
“ Members’ Subscriptions.....		110 00	
“ Legislative Grant.....		83 49	
		<hr/>	196 85
CR.			
By Prizes for Live Stock.....	30 00		
“ “ Field Products.....	5 62		
“ “ Dairy “.....	1 25		
“ “ Horticultural Products.....	1 98		
“ “ Arts and Manufactures.....	9 60		
		<hr/>	48 45
“ Preparing Show Grounds.....		3 25	
“ Purchase of Live Stock.....		131 92	
“ Working Expenses.....		13 00	
		<hr/>	196 62
Balance in hand.....			0 23

REPORT.

The appearance of the crops was very good until the heavy rains about the beginning of July drenched the ground. First, the Indian corn showed by the colour of the blade that it was hurt. Frequent showers injured the hay when cut, and caused some fields of timothy to stand until the seed fell off; spoiled the colour of the barley and weakened the straw of the wheat, so that all the crops were a partial failure. Drainage is the only thing that can be done to prevent a failure of crops from the same cause in this hard clay subsoil and we are happy to see large drains being cut under the Drainage Act, and by the Board of Works, which will improve our crops and be the means of making the locality more healthy, so that should the poor farmer ever get wealthy, he will enjoy it.

KINGSTON.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		160 92	
“ 231 Members’ Subscriptions.....		323 50	
“ Admissions to Show.....		14 03	
“ Legislative Grant.....		350 00	
		<hr/>	848 45
CR.			
By Prizes for Live Stock.....	24 00		
“ “ Field Products.....	20 50		
“ “ Dairy “.....	3 50		
“ “ Horticultural Products.....	124 75		
“ “ Arts and Manufactures.....	53 50		
		<hr/>	226 25
“ Working Expenses.....		191 20	
		<hr/>	417 45
Balance in hand.....			431 00

REPORT.

The past season, exceptionally dry even among the normally dry seasons of this part of Canada especially in the spring and early summer months, induced the members of the Board of our Electoral Division Society to dispense with the usual Spring Show, which, if exhibiting our barrenness, only might have had an injurious effect on our general object of stimulating the many to greater efforts to compass for themselves what had been accomplished by a few, or even to surpass them.

Our Autumn Show, however, notwithstanding the great and continued dryness, especially in the department of grapes out-door and under glass, was such as to give great satisfaction.

But why so much general apathy on the subjects of Agriculture and Horticulture? Here science lags behind practice more than, perhaps, in any other department. Latterly, however, more effort has been made to trace effects to those scientific laws which lie at the basis of all true agricultural practice. But why so few exact experiments—test questions put to nature to win from her the secret of her ways. Men with persevering effort strive to understand the constitution of the sun and of the moon—and for this, so far, we can scarce too highly commend them—but why not with more zealous, studied and continued effort, try to understand this earth on which we stand and from which we derive our being and continuance. We are surprised that so few men of science devote themselves to the most important of all sciences, with the object of eliminating those subtle but unvarying laws which underlie and necessitate the varied, interesting and beautiful, and all but miraculous phenomena which exhibit themselves in the great laboratory of nature, and which, when once really ascertained and complied with, become forever after (*Ceteris paribus*) the sure guarantees of success.

And how pleasant, not to act blindly but to have an intelligent conception of what we are doing, and of why we are doing it! Thus would agriculture become not only a surer and better instrumentality for the supplying of our wants, and the strengthening of our physical frames, but a school, and the best school, for the training of our higher faculties.

* * * * *

LAMBTON

Dr.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			140	53		
“ 212 Members’ Subscriptions			364	69		
“ Admissions to Show			77	48		
“ Legislative Grant			700	00		
“ Proceeds Sale of seeds			130	95		
Cr.					1413	65
By Prizes for Live Stock	263	36				
“ “ Field Products	75	97				
“ “ Dairy “	25	75				
“ “ Horticultural Products	21	10				
“ “ Agricultural Implements	31	50				
“ “ Arts and Manufactures	62	83				
	480	51				
Unpaid	7	05				
			473	46		
“ Prizes of Previous Year			34	25		
“ L. G. to Township Societies			441	10		
“ Preparing Show Grounds			50	50		
“ Purchase of Seed			137	10		
“ Agricultural Publications			32	20		
“ Working Expenses			121	09		
			1289	70		
Balance in hand			123	95		

REPORT.

At the commencement of another year we are called on to review the past, and, in some measure, anticipate the future. In this part of the Province, at least, the staple productions of the County during the past year proved sadly deficient. Fall wheat, under favourable circumstances, was good, though in many places, badly winter killed. There was less injury from the midge than for many years past. Spring wheat was certainly less than half an ordinary crop. Peas were no better; barley and oats were also deficient, though not to the same extent. The season was peculiar. The weather was not favourable for early seeding; but the month of May was, in this respect, quite favourable. The land was mostly in pretty good condition for sowing, and the seed started well, and during the early part of June the crops looked well, and promised an abundant harvest. The heavy and continued rains of the latter part of June, and during the whole of July, so completely saturated the ground that spring grain was all but destroyed, and fall wheat greatly injured. Grass proved a heavy crop, but on account of the frequent and drenching showers, it was in many instances impossible to make good hay. Pastures were good during the whole season; though from the constant wet, and vast swarms of flies, stock did not thrive so well as might otherwise have been expected.

Notwithstanding such drawbacks, however, progress is every where apparent in the County. Roads are being rapidly improved. The old log house is rapidly giving place to handsome frame or brick buildings. Improved school houses, and commodious meeting houses are getting quite common, thus showing that while the people are mindful of the physical, they are not forgetful of the mental, moral and spiritual wants of the community.

The high prices paid for stock, especially for cattle, and hogs, have caused increased attention to be given to improvement in the breeds of these animals. Pure bred cattle are yet scarce in this County, though every year is adding to their number. There are now also a large number of good grade cattle,—a very great improvement on the original breeds. The breed of horses has been very much improved of late years. We have few of that class that would be called “heavy draught horses,” but a large number of substantial “agricultural horses,” and many well suited for the carriage, for the road, and for general purposes. In this County we have also a very good stock of long-wooled sheep, especially Leicesters. The fine wooled breeds have, as yet, been comparatively neglected in this locality.

The annual Exhibition of the Society took place at the Society's grounds in the town of Sarnia, on the 13th and 14th of October. The weather proved favourable, and the Exhibition in its different departments was successful. Horses, cattle, sheep and hogs, were well represented. The samples of grain were not so numerous, nor the quality so good as on many former occasions. Potatoes were abundant, and of very good quality. Other roots were but scantily represented; some of the samples however, were very good. In the dairy department there was on Exhibition, for the first time in this County, a factory made cheese. It is probable that this branch of industry will be rapidly extended in this County, as it has been in many others. The samples of butter were very numerous, and the quality excellent. There was in this department a very close competition for a special prize (a beautiful china tea set), offered by Mr. Gordon, of Sarnia. Domestic manufactures and ladies' work were well represented. In agricultural implements there is a great improvement, thus obviating the necessity of going to a distance to purchase. * * * *

In conclusion, your Board would express their gratitude to the gracious Disposer of all events, for the peace and quietness which we in these parts have been permitted to enjoy, and which is in such striking contrast to the horrid scenes which for the last six or seven months, have been constantly witnessed on the other side of the Atlantic. In peaceful security under the old flag, may our young Dominion long enjoy the substantial blessings of peace and prosperity, and the ample enjoyment of personal liberty, under the wise restraint of just and equal laws.

Bosanquet.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		12 21	
“ 80 Members' Subscriptions		80 00	
“ Admissions to Show		26 85	

	\$ cts.	\$ cts.	\$ cts.
To Legislative Grant		30 25	
“ Municipal Grant.....		25 00	
“ Miscellaneous Receipts		13 50	
		<u>187 81</u>	
CR.			
By Prizes for Live Stock.....	47 00		
“ “ Field Products.....	11 00		
“ “ Dairy “	3 50		
“ “ Horticultural Products.....	12 15		
“ “ Agricultural Implements.....	3 75		
“ “ Arts and Manufactures.....	15 65		
“ “ Ploughing Match.....	22 00		
		<u>115 05</u>	
“ Preparing Show Grounds ...		3 50	
By Working Expenses.....		34 10	
		<u>152 65</u>	
Balance in hand.....			35 16

Brooke.

	\$ cts.	\$ cts.	\$ cts.
DR.			
To Balance in hand.....		36 86	
“ Members’ Subscriptions.....		268 25	
“ Legislative Grant.....		120 25	
“ Proceeds Sale of Live Stock and ‘Service’		106 75	
		<u>532 11</u>	
CR.			
“ Purchase of Live Stock.....		378 75	
“ Working Expenses.....		44 75	
		<u>423 50</u>	
Balance in hand.....			108 61

REPORT.

This Society has now been six years in existence and your Directors have great reason to congratulate you on its progress. At its formation it was determined to forego the doubtful advantages of a Township Show, and confine its efforts in the way of improving the live stock of the Township. Consequently a number of pure bred bulls have, from time to time, been purchased; until, last season, you had the services of seven in the Township. Your Directors consider the best proof that can be given that the plan, which has been adopted, has been the best way of expending the means at their disposal, is to refer you to your prosperous career. From having started from small beginnings and under very discouraging circumstances, you have now become one of the largest and strongest Township Societies in Ontario. At the same time they would not conceal from you the fact that you have difficulties to contend with, and this last season especially. Several of your bulls have not been as successful in getting stock as you could have wished; but whether that has arisen from the wet season (as some have supposed), or from the bulls being overworked by the large number of cows that have gone to them, in some cases considerably over one hundred to a bull, you have not been able to determine.

Enniskillen.

	\$ cts.	\$ cts.	\$ cts.
DR.			
To Balance in hand.....		129 50	
“ 126 Members’ Subscriptions.....		131 25	
“ Legislative Grant.....		65 25	
“ Municipal Grant.....		100 00	

	\$	cts.	\$	cts.	\$	cts.
To Proceeds Sale of Live Stock.....			172	19		
“ Miscellaneous Receipts.....			4	16		
					602	35
CR.						
By Prizes for Live Stock.....	67	90				
“ “ Field Products.....	18	95				
“ “ Dairy “.....	10	70				
“ “ Horticultural Products.....	10	20				
“ “ Agricultural Implements.....	15	50				
“ “ Arts and Manufactures.....	14	25				
	137	50				
Unpaid.....	22	50				
			115	00		
“ “ of previous year.....			17	35		
“ Preparing Show Grounds.....			13	50		
“ Purchase of Live Stock.....			201	00		
“ Working Expenses.....			87	00		
					433	85
Balance in hand.....					168	50

REPORT.

The Directors of the Enniskillen Agricultural Society in presenting their Annual Report for the past year, have to congratulate the Society on the increase of Membership; and in the support and encouragement which has been extended to it by the Municipal Council of this Township, and the inhabitants of the Village of Petrolia.

The Annual Exhibition held at Petrolia, October 11th, was not as successful as your Directors would wish, owing principally to the unfavourable season, which preceded it; the excessive rains, which prevailed during the season in this section affected the crops to an unusual extent, both in quantity and quality.

The propriety of purchasing some well-bred Stock was discussed at the last meeting, and it was deemed expedient that a portion of the funds should be appropriated to that purpose. To meet the views of the Society, your Directors purchased, at the Western fair, London five Leicester Rams, two Berkshire, and two Suffolk Boars, at a cost to the Society of \$201, excluding expenses. They were sold on the show day by public auction; purchasers getting the benefit of a year's credit.

Moore.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			60	00		
“ 173 Members' Subscription.....			205	10		
“ Admissions to Show.....			6	12		
“ Legislative Grant.....			89	75		
“ Municipal Grant.....			50	00		
“ Proceeds Sale of Stock.....			160	45		
					571	42
By Prizes for Live Stock.....	81	64				
“ “ Field Products.....	22	50				
“ “ Dairy “.....	10	45				
“ “ Horticultural Products.....	2	55				
“ “ Agricultural Implements.....	10	75				
“ “ Arts and Manufactures.....	13	10				
			140	99		
“ Preparing Show Grounds.....			38	23		
“ Purchase of Live Stock.....			200	00		

	\$	cts.	\$	cts.	\$	cts.
" Agricultural Publications			50	35		
" Working Expenses.....			81	83		
					511	40
Balance in hand					60	02

REPORT.

We commenced the year with a balance in hand of \$60. We got from the different collectors the sum of \$205 10c., being an increase of \$25 over the year before.

We appropriated the sum of \$200 for the purchase of sheep and pigs, and sold them on the day of the Annual Exhibition, to members of the Society, on the condition that they should be kept within the limit of the Society for two years. The stock did not realize so much as the Directors anticipated : as profit was not their object, but the improvement of stock, they were satisfied.

Our Exhibition of this year was not so good as it would have been, owing to the heavy rains the night before, which prevented many from a distance attending. Cattle, although fairly represented, did not come up to the year before. Horses did. Sheep were a shade better. Pigs, poultry, grain, domestic and fancy articles and seeds, were far ahead of the year before ; while dairy produce diminished ; so did roots and vegetables.

With all, we have cause to be thankful for the way in which the crops have turned out. The prospects, during the months of June and July, were not very promising. Still, wheat of all kinds, has been an average crop. Oats above the average. Corn and peas below, while fruit was far above. Stock commands a high price. Hay a fair remunerating price ; although corn and peas are scarce. Pork is below the price of last year.

* * * * *

Plympton.

Dr.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			22	20		
" 132 Members' Subscriptions.....			134	00		
" Legislative Grant.....			59	25		
" Municipal Grant			20	00		
					235	45
By Prizes for Live Stock	88	00				
" " Field Products.....	25	25				
" " Dairy "	2	25				
" " Horticultural Products	3	75				
" " Agriculntural Implements	13	50				
" " Arts and Manufactures.....	11	25				
" " Ploughing Match.....	25	50				
			169	50		
" To Working Expenses.....			29	50		
					199	00
Balance in hand.....					36	45

PRESIDENT'S ADDRESS.

I am happy to meet you at this annual meeting, which is the fifteenth annual gathering of the Plympton Branch Agricultural Society, and under very favourable circumstances, seeing that we enjoy peace and plenty in this our favoured land, hoping we may long enjoy such great blessings, for which we should praise His name who is the all-wise Disposer of events, in conferring such blessings on this land of our adoption. In looking at the features of your Society I have nothing particular to remark ; it is in a flourishing state, your Directors have worked well and have added a good number of members to your Society over 1869, and I trust your new Directors for the present year will yet add more. I must congratulate you on the

success of your last annual show, held in the village of Wyoming, on the first of October, and if it had not been for the muddy state of the roads it would have been the greatest show your Society ever had. The entries for young horses were very great, far above any previous show, and a decided improvement in the breed. There were some very fine specimens of thoroughbred Durham bulls, two of which took first prizes at the County show at Sarnia. There was a great falling off in rams, but there were some fine lots of breeding ewes and a splendid display of fat sheep; their sale occasioned keen competition. I am sorry to state that grain was scarcely represented, and a poor quality, owing to the extreme wet season. Roots were much the same as grain, greatly injured by the floods. Of fruit we had a good show, fine quality and extra large. In agricultural implements there was a good show but not many exhibitors. In the mechanics' class there were some beautiful carriages, which beat the County show in Sarnia. In the farmers' class there was not much competition. In domestic manufactures there was not so much competition as formerly. I think, owing to the demand for sheep on the American side, there is not so much wool manufactured by the farming community. The ploughing match was a success, and some good work was done in all three classes. I feel happy to state to you that we have some good ploughmen in this Township, and if more of them would come out and compete, they would see good work done and be led on to do good work themselves. Plympton Township stands high for ploughmen, and I trust it will keep its character good. You will see by the Auditor's report, on the Treasurer's books, the financial state of your Society is pretty good. There is a balance in the Treasurer's hands of \$36 45. I sincerely hope that a kind Providence will bless us with a good season for the husbandman, so that we may all rejoice in the fruit of our labours.

Warwick.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			22	06		
“ Members’ Subscriptions.....			116	00		
“ Admissions to Show.....			6	00		
“ Legislative Grant.....			52	10		
“ Miscellaneous Receipts.....			4	00		
					200	16
CR.						
By Prizes for Live Stock		66	75			
“ “ Field Products.....		31	60			
“ “ Dairy “		3	25			
“ “ Horticultural Products.....		9	25			
“ “ Agricultural Implements.....		5	50			
“ “ Arts and Manufactures.....		13	05			
				129	40	
By Working Expenses.....				30	55	
					159	95
Balance in hand.....					40	21

NOTE.—The Exhibition, considering the unfavourable character of the season, was quite equal to the general expectation. Stock, of pure bred varieties, though not numerous in the Township are steadily increasing. In consequence of the unusual wetness and coldness of the season both grain and root crops suffered as to quantity and quality, and the receipts of farmers from these sources were of an unremunerative character in general. Live stock, however, did better and commanded satisfactory rates, and upon such farms as were naturally dry, or made so by underdraining, the crops were much superior, clearly indicating the necessity and advantages of this mode of amelioration. Until the artificial draining of wet lands is effectually carried out, Canadian farmers will always be largely at the mercy of the varying seasons. Underdraining, deeper and cleaner culture, with proper attention to the order of crops, will greatly neutralize the injurious effects both of wet and dry seasons, from which farmers, every now and then, severely suffer.

LANARK, NORTH.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		0 69	
" Members' Subscriptions.....		212 25	
" Legislative Grant.....		700 00	
" Proceeds Sale of Seeds.....		139 28	
" From Ramsey Society for Union Show.....		137 00	
CR.		—	1189 22
By Prizes for Live Stock.....	103 50		
" " Field Products.....	20 00		
" " Dairy ".....	28 85		
" " Horticultural Products.....	4 50		
" " Agricultural Implements.....	18 10		
" " Arts and Manufactures.....	34 00		
" " Growing Crops.....	65 25		
" " Ploughing Match.....	43 00		
	317 20		
Unpaid	105 15		
	—	212 05	
" Prizes of previous year.....		5 50	
" L. G. to Township Societies.....		401 00	
" Purchase of Seed		145 93	
" Preparing Show Grounds.....		16 73	
" Agricultural Publications.....		120 00	
" Working Expenses.....		176 52	
		—	1077 73
Balance in hand.....			111 49

Dalhousie.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		168 14	
" 73 Members' Subscription.....		78 27	
" Legislative Grant.....		85 00	
" Proceeds Sale of Seeds		192 14	
CR.		—	523 55
By Prizes for Live Stock.....	32 50		
" " Field Products	20 75		
" " Dairy ".....	5 50		
" " Horticultural Products.....	2 50		
" " Agricultural Implements	5 00		
" " Arts and Manufactures.....	18 50		
	—	84 75	
" " Freight, &c., on Grain.....		74 73	
" Preparing Show Grounds.....		8 00	
" Purchase of Seed.....		205 20	
" Agricultural Publications.....		14 58	
" Working Expenses.....		35 98	
		—	423 24
Balance in hand.....			100 31

Lanark.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		221 51	
" 125 Members' Subscriptions.....		158 90	

	\$	cts.	\$	cts.	\$	cts.
To Legislative Grant.....			140	00		
" Proceeds Sale of seed.....			365	17		
" Miscellaneous Receipts.....			17	70		
					903	28
CR.						
By Prizes for Live Stock.....	61	20				
" " Field Products.....	22	00				
" " Dairy ".....	7	25				
" " Horticultural Products.....	7	25				
" " Agricultural Implements.....	8	00				
" " Arts and Manufactures.....	34	99				
			140	69		
" " Arrears			11	90		
" Preparing Show Grounds.....			10	50		
" Purchase of Seeds.....			343	35		
" Agricultural Publications.....			50	77		
" Working Expenses			54	49		
					611	70
Balance in hand.....					291	58

Pakenham.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand.....			43	37		
" 40 Members' Subscriptions ..			69	12		
" Legislative Grant			99	00		
					211	49
CR.						
By Prizes for Live Stock.....	39	75				
" " Field Products.....	4	00				
" " Dairy ".....	5	00				
" " Horticultural Products.....	10	02				
" " Agricultural Implements.....	5	00				
" " Arts and Manufactures	4	60				
" " Growing Crops.....	20	00				
			88	37		
" Prizes of previous year.....			25	38		
" Agricultural Publications.....			36	75		
" Working Expenses.....			30	74		
					181	24
Balance in hand.....					30	25

Ramsay.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand			2	40		
" Members' Subscriptions			73	00		
" Legislative Grant.....			77	00		
					152	40
CR.						
" Funds merged in County Society			137	00		
" Working Expenses.....			13	85		
					150	85
Balance in hand.....					1	55

LANARK, SOUTH.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		294 26	
" 206 Members' Subscriptions.....		213 00	
" Admissions to Show.....		81 42	
" Legislative Grant.....		700 00	
" Proceeds Service of Live Stock		17 00	
" Miscellaneous Receipts.....		75 75	
		<hr/>	1381 43
CR.			
By Prizes for Live Stock.....	132 75		
" " Field Products.....	31 50		
" " Dairy "	39 50		
" " Horticultural Products.....	34 50		
" " Agricultural Implements.....	52 00		
" " Arts and Manufactures.....	54 00		
	<hr/>	344 25	
Unpaid.....	4 00		
	<hr/>	340 25	
" Prizes of previous year.....		57 00	
" L. G. to Township Societies.....		288 24	
" Preparing Show Grounds		109 43	
" Purchase of Live Stock		447 20	
" Agricultural Publications		26 00	
" Working Expenses.....		176 49	
		<hr/>	1444 61
Balance due Treasurer			63 18

REPORT.

Your Directors have much pleasure in presenting to you their Annual Report, the year which has just closed having been one of great progress and prosperity to your Society. This pleasant result has been attained under very unfavourable circumstances generally. The prosperity of agricultural societies depends very much on the season being favourable. We have, however, to report a gratifying exception to this rule, as, notwithstanding the past summer having been one of unexampled drought and the crops throughout Central Canada a consequent failure, marked success has attended this Society during the past year, the membership having more than doubled since the present Board of Directors assumed their responsibilities.

* * * *

The Exhibition was a success in every class, with the exception of swine, of which there was no pretence of a collection. It is to be regretted that more attention is not paid to the raising of improved breeds of swine, as it is a fact beyond contradiction, that in this respect this County is far behind what it should be. It is somewhat surprising that the breed has not long since been more improved, when the wants of the lumbering districts in this vicinity are considered. With the proper breeds of hogs and due care and attention given to their rearing, the yield of pork from the same number of animals and the same amount of food might be almost doubled.

With respect to horses we have to notice a singular fact. In a lumbering County, such as ours is, it would be natural to suppose that the breed of horses would have been improved, but we regret to say that this has not been the case. It is well known that for many years no new blood has been introduced into our old breeds. Indeed very little attention seems to be given to this particular. When the farmer determines upon raising a foal, too often the first entire horse that passes his steading is allowed to do service, when every precaution should be observed, that none but the most approved and well known breeds should be permitted to effect service. By the adoption of this suggestion farmers would soon have the satisfaction, not only of possessing superior animals to perform the labour required in their own

service, but such as would realize much higher prices on being sold than can be obtained for those that are no easier reared and which are inferior in size and appearance.

The show of poultry was very creditable and evinced considerable care and attention in breeding.

In labour saving agricultural implements, waggons, buggies, &c., the Exhibition was much in advance of any previous year.

As usual, at our exhibitions, a large number of members competed for the liberal prizes offered for butter. The samples shown could scarcely be excelled for quality in the Province of Ontario, and make it apparent that this branch of industry receives careful attention from many of the farmers in this Riding, and is one which is a source of profit to the producer.

* * * *

In concluding this portion of our report we have to congratulate the Society on the interest manifested in its affairs by the public of Perth and vicinity, in evidence of which it is only necessary to mention that the receipts at the door for admission to the exhibition exceeded eighty dollars. We would also favourably mention the support accorded to the Society by many gentlemen, especially in Perth, who have connected themselves with it, not that they expect to receive any direct benefit from it, but because they are desirous to lend its efforts a helping hand. In particular we have to acknowledge the receipt during the past year of two handsome donations,—one of twenty dollars from the Hon. Alex. Morris, and the other of ten dollars from Abraham Code, M. P. P.

* * * *

As a general rule the farmers in this County are alive to the advantages of thorough farming, but often, from circumstances over which they have no control, their efforts in this direction are partially frustrated. The principal difficulty that has to be contended with, is the scarcity of manure. Notwithstanding the drawbacks that many of you have to encounter in this respect, your County is as far advanced, and your farms in as good a state of tillage as in many more favoured localities in the Western parts of Ontario. We would respectfully urge upon the members ever to keep in view the fact that as the land is generously supplied with manure, and a proper system of rotation of crops put in practice, just in such measure will it yield its fruits to the husbandman. By attention to these two particulars the land would become more valuable each year, and be a source of profit to the farmer and of pride to the locality, in which it is situated. Land, on the other hand, which is cropped year after year without a sufficient supply of manure and a proper rotation of crops, becomes deteriorated in value and unremunerative.

A matter of crying evil in this County is the want of care exercised by those entrusted with the repairs of our highways. We would urge on all pathmasters to fully carry out the provisions of the law for keeping down weed pests, and thus assist in eradicating thistles and other weeds that flourish so abundantly through the County.

We would like to see the evil caused by the growth of weeds on the railway tracks in this County remedied.

It would be impossible to enumerate within the limits of this Report all the advantages to be derived from active membership with a progressive and enlightened Agricultural Association. With increasing knowledge and a friendly strife to excel, as a natural consequence results in the ownership of a better class of stock, a more thorough cultivation of the ground, the saving of much labour, and the adoption of better designs of buildings for farm purposes, with a thousand and one other benefits, along with an increase of wealth and comfort.

* * * *

Bathurst.

Dr.	\$	cts.	\$	cts.	\$	cts.
To Members' Subscriptions.....			56	00		
“ Legislative Grant.....			57	77		
“ Cash on Note.....			180	00		
“ Proceeds of Service of Stock.....			26	79		
					320	56

CR.	\$ cts.	\$ cts.	\$ cts.
By Purchase of Live Stock and Incidental Expenses.....		312 00	
“ Working Expenses.....		2 00	
		<u>314 00</u>	
Balance in hand.....			6 56

REPORT.

* * * * * *

After due consideration as to how the funds of the Society could be best expended for the benefit of the members, the Directors determined upon purchasing from Mr. Naismith, of Ramsay, a thorough bred Durham bull, bred by Mr. Stone, of Guelph. In order to carry out this determination it became necessary to borrow on the credit of the Society the sum of one hundred and eighty dollars for one year; this was effected from Mr. James Cameron, and the bull purchased costing the Society the sum of two hundred and seven dollars delivered in Perth.

That having purchased a first class Durham bull, they placed him in as central a position for the season as could be obtained, and also the fees for his services at half what they could be obtained for had he been owned by a private individual, your Directors reasonably supposed that the members would avail themselves of this opportunity for improving their stock to the full extent permitted by the rules of the Society (two cows at fifty cents each, and the third cow one dollar). Your Directors regret that few comparatively availed themselves of the opportunity to the full extent, and that a certain amount of the fees charged still remain unpaid.

* * * *

Beckwith.

DR.	\$ cts.	\$ cts.	\$ cts.
“ To Balance in hand.....		32 27	
“ 75 Members' Subscriptions.....		112 73	
“ Miscellaneous Receipts.....		20 47	
CR.		<u>165 47</u>	
By Prizes for Live Stock.....	60 00		
“ “ Field Products.....	24 00		
“ “ Dairy “.....	7 50		
“ “ Agricultural Implements.....	11 00		
“ “ Arts and Manufactures.....	25 50		
	<u>128 00</u>		
“ Agricultural Publications.....		24 00	
“ Working Expenses.....		13 47	
		<u>165 47</u>	

NOTE.—The Exhibition was, on the whole, quite as good as could be expected, considering the unfavourable character of the season.

Drummond.

DR.	\$ cts.	\$ cts.	\$ cts.
To Members' Subscriptions.....		87 00	
“ Legislative Grant.....		90 47	
“ Proceeds Sale of Live Stock.....		29 50	
		<u>206 97</u>	
CR.			
By Purchase of Live Stock.....	188 50		
“ Working Expenses.....	11 39		
	<u>199 89</u>		
Balance in hand.....			7 08

NOTE.—The Society has only been in existence one year, and intends devoting its means to the improvement of stock.

<i>Montague.</i>			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		1 04	
" 137 Members' Subscriptions.....		152 75	
" Legislative Grant.....		140 09	
" Proceeds of Sale of Seeds		159 13	
		<u>452 92</u>	
Cr.			
By Prizes for Live Stock.....	50 04		
" " Field Products.....	22 51		
" " Dairy "	6 37		
" " Horticultural Products	3 00		
" " Agricultural Implements.....	3 00		
" " Arts and Manufactures.....	17 78		
	<u>102 70</u>		
" Preparing Show Grounds.....		6 00	
" Purchase of Seeds.....		198 24	
" Agricultural Publications.....		25 00	
" Working Expenses.....		34 83	
		<u>366 77</u>	
Balance in hand.....			86 15

LEEDS AND NORTH GRENVILLE.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		134 06	
" Members' Subscriptions.....		37 90	
" Admissions to Show		232 43	
" Legislative Grant		700 00	
" Miscellaneous Receipts.....		16 50	
		<u>1120 89</u>	
Cr.			
By Prizes for Live Stock.....	220 00		
" " Field Products	27 10		
" " Dairy "	9 85		
" " Horticultural Products	14 43		
" " Agricultural Implements.. ..	16 10		
" " Arts and Manufactures.....	56 00		
" " Growing Crops.....	75 25		
	<u>418 73</u>		
" " Unpaid	174 32		
	<u>244 41</u>		
" L. G. to Township Societies.....		420 00	
" Preparing Show Grounds		75 77	
" Agricultural Publications.....		14 00	
" Working Expenses.....		157 00	
		<u>911 18</u>	
Balance in hand			209 71

<i>Gower, South.</i>			
Dr.	\$ cts.	\$ cts.	\$ cts.
" 52 Members' Subscriptions		52 00	
" Legislative Grant.....		57 70	
		<u>109 70</u>	

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock.....	44	05				
" " Field Products.....	13	28				
" " Dairy ".....	2	26				
" " Horticultural Products.....	2	45				
" " Arts and Manufactures.....	17	64				
				79	68	
" Working Expenses				30	02	
						109 70

Kitley and Elmsley.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			7	70		
" 60 Members' Subscriptions			179	95		
" Legislative Grant			198	00		
						385 65

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock.....	67	74				
" " Field Products.....	20	76				
" " Dairy ".....	7	00				
" " Arts and Manufactures	12	50				
				108	00	
" Purchase of Stock and Seeds.....				132	39	
" Agricultural Publications.....				32	75	
" Working Expenses.....				29	15	
						302 29
Balance in hand						83 36

Orford.

DR.	\$	cts.	\$	cts.	\$	cts.
To Members' Subscriptions			63	58		
" Admissions to Show.....			16	80		
" Legislative Grant			63	30		
						143 68

CR.	\$	cts.	\$	cts.	\$	cts.
By Premiums			139	00		
" Sundries			13	75		
" Working Expenses.....			23	50		
						176 25
Balance due Treasurer.						32 57

Wolford.

DR.	\$	cts.	\$	cts.	\$	cts.
" Members' Subscriptions			91	98		
" Legislative Grant			100	50		
						192 48

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock.....	92	65				
" " Field Products.....	42	40				
" " Dairy " Honey, Sugar, &c.....	10	80				
" " Horticultural Products.....	7	15				
" " Arts and Manufactures.....	18	00				
				171	00	
" Working Expenses				21	48	
						192 48

LEEDS, SOUTH.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		219 01	
“ 59 Members' Subscriptions.....		81 50	
“ Legislative Grant		700 00	
Cr.			1000 51
By Prizes for Live Stock.....	115 00		
“ “ Field Products	44 50		
“ “ Dairy Products.....	33 50		
“ “ Horticultural Products.....	9 00		
“ “ Agricultural Implements.....	19 00		
“ “ Arts and Manufactures	65 00		
		286 00	
“ L. G. to Township Societies		420 00	
“ Preparing Show Grounds.....		29 50	
“ Purchase of Live Stock.....		244 47	
“ Agricultural Publications.....		28 50	
“ Working Expenses.....		9 00	
			1017 47
Balance due Treasurer.....			16 96

REPORT.

The weather of 1870 was on the whole favourable for farming operations—though rather dry. The crops in this section of the country were generally good in quality, and the yield was a fair average. The production of grain, however, in this neighbourhood is decreasing, and our farmers are depending more on dairy produce and the raising of stock, and so far they have found this change of system advantageous and profitable. With the view of improving our stock the Society has lately purchased a very superior Ayrshire bull, at an expense of over two hundred dollars, and his blood will no doubt soon shew itself in a new generation of cows possessed of superior milking qualities.

The manufacturing interests of Gananoque, the principal town in the Riding, are prosperous, and increasing in importance. A large paper mill is about to be erected, in which *Basswood* will be largely used in the manufacture of paper, and the mill will give employment to a considerable number of people.

During the past year the Society has met with a heavy loss by the death of its President, Dr. Thomas Richmond, who for many years filled that position, and was known throughout Canada as an enterprising agriculturist, and a friend of every scheme for developing and improving the resources of the country. It will be hard to find a man to supply his place.

Crosby, North.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		36 90	
“ Members' Subscriptions.....		166 50	
“ Legislative Grant		152 00	
“ Municipal Grants.....		200 00	
“ Miscellaneous Receipts.....		2 00	
			557 40
Cr.			
By Prizes for Live Stock.....	97 00		
“ “ Field Products	80 00		
“ “ Dairy “	9 00		
“ “ Horticultural Products.....	7 00		
“ “ Arts and Manufactures.....	36 00		
“ “ Growing Crops	61 00		
		290 00	

	\$	cts.	\$	cts.	\$	cts.
By Preparing Show Grounds			200	00		
" Working Expenses			72	00		
					562	00
Balance due Treasurer.....					4	60

Lansdown.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			0	64		
" 111 Members' Subscriptions			136	00		
" Legislative Grant			124	78		
" Proceeds Sale of Stock.....			37	25		
					298	67

Cr.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock	42	75				
" " Field Products.....	9	50				
" " Dairy "	13	75				
" " Horticultural Products	11	38				
" " Agricultural Implements.. ..	6	00				
" " Arts and Manufactures	18	30				
			101	68		
" Purchase of Seeds.....			49	16		
" " Stock.....			89	62		
" Working Expenses.....			24	39		
					264	85
Balance in hand.....					33	82

REPORT.

We are also happy to be able to say that a very marked improvement is observable in cattle, sheep and hogs, as compared with the same description of stock previous to the organization of this Society in 1864, which must in a great measure be attributed to the improved breeds of animals purchased and introduced by this Society. This Society has every year since its formation used a large portion of its funds for the purchase of improved breeds of animals, and for seed grain, all of which have been used to the best advantage, and have given general satisfaction. Last year they purchased a quantity of seed Oats, known by the name of Surprise Oats, and distributed them among the members of the Society, and although the season was not favourable for oats, in many instances the yield was surprising. The Society also purchased during the year one Yorkshire Boar and three Leicester Rams, which, it is hoped, will add to the improvement, already noticeable, in their respective classes.

Our Annual Exhibition was held on the 13th day of October, the number of entries was 314, and the amount awarded for prizes was \$101 68. The day was fine, the attendance large, and the Exhibition fully up to our expectations.

Owing to the very dry weather during the summer, the hay crop was below an average, and fears were entertained that there would be a scarcity of fodder, but the fall turned out very favourable, and it was quite late before it became necessary to fodder young stock, and if the next spring is not unusually late, there will be abundance for all our wants. Other crops, as a general thing, were below an average, but all were well saved. Within the last two years three cheese factories have commenced the manufacture of cheese, using the milk of over one thousand cows, which has proved remunerative to those who sell their milk, and likewise to the manufacturers. It will also be the means of recuperating over cropped farms. Upon the whole, we have every reason to be satisfied with the general prosperity of the neighbourhood, and have reason for congratulation that our efforts in the direction of Agricultural improvement have not been in vain.

<i>Yonge and Escott.</i>			
DR.	\$ cts.	\$ cts.	\$ cts.
To Members' Subscriptions.....		65 68	
" Legislative Grant.....		58 15	
		<u>123 83</u>	
CR.			
By Prizes for Live Stock	40 59		
" " Field Products	6 45		
" " Horticultural Products	3 81		
" " Agricultural Implements.....	7 15		
" " Arts and Manufactures.....	9 88		
" " Growing Crops	18 45		
		<u>86 33</u>	
" Working Expenses		37 50	
		<u>123 83</u>	

<i>LENNOX.</i>			
DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		45 76	
" 256 Members' Subscriptions		257 00	
" Legislative Grant		700 00	
" Miscellaneous Receipts.....		27 00	
		<u>1029 76</u>	
CR.			
By Prizes for Live Stock	440 25		
" " Field Products.....	48 25		
" " Dairy "	24 75		
" " Horticultural Products.....	32 75		
" " Agricultural Implements.....	90 50		
" " Arts and Manufactures.....	84 87		
	<u>711 37</u>		
" " Unpaid.....	43 50		
		<u>677 87</u>	
" Prizes of previous year.....		18 75	
" L. G. to Township Societies.....		53 00	
" Working Expenses.....		98 65	
		<u>848 27</u>	
			<u>181 49</u>

<i>Amherst Island.</i>			
DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		1 92	
" 53 Members' Subscriptions...		53 00	
" Legislative Grant		53 00	
		<u>107 92</u>	
CR.			
By Prizes for Live Stock.....	70 00		
" " Field Products.....	22 50		
" " Dairy "	2 25		
" " Arts and Manufactures.....	7 12		
		<u>101 87</u>	
" Working Expenses.....		4 50	
		<u>106 37</u>	
			<u>1 55</u>

Balance in hand.....

1 55

LINCOLN.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		3 6 58	
“ Members’ Subscriptions.....		256 00	
“ Admissions to Show		228 75	
“ Legislative Grant		700 00	
“ Municipal Grant.....		250 00	
“ Grantham Agricultural Society.....		344 00	
		<u>2105 33</u>	
Cr.			
By Prizes for Live Stock.....	533 25		
“ “ Field Products.....	99 75		
“ “ Dairy “	21 50		
“ “ Horticultural Products.....	74 50		
“ “ Agricultural Implements.....	19 00		
“ “ Arts and Manufactures.....	182 50		
	<u>930 50</u>		
Unpaid.....	42 50		
		<u>888 00</u>	
Prizes of previous year.....		51 50	
“ L. G. to Township Societies.....		442 00	
“ Preparing Show Grounds.....		3 05	
“ Working Expenses.....		329 74	
		<u>1746 29</u>	
Balance in hand.....			359 04

REPORT.

* * * * *

We have every reason to be proud of our success in the Exhibitions of the past year. The various classes of horses at the spring show were very superior, and leave nothing really to be desired. Although the show of bulls was small the animals exhibited were good, and there is the well known difficulty of bringing them long distances that will in any case prevent a large attendance in that class.

Our fall show was on the whole a success, although in some departments the Exhibition was hardly up to former years, in others the advance was very marked. In the classes of horses we are most decidedly of opinion that, although in number, quality and style, there was a decided improvement, yet a change is required both in the manner of showing and also of classing before we degenerate into what Josh Billings calls “a Fust Class Agricultural Horse Trot.” And here we would remark that as other County Societies have procured them with great advantage to themselves financially and otherwise, it seems imperatively necessary that suitable grounds should be procured for the holding of our Annual Exhibitions, so as to prevent the difficulties experienced for the last two years in showing horses on the streets.

In cattle the show was hardly up to the mark. Some fine animals were shown, but we cannot say but that it was not what it might be in this County.

Our show of sheep was first class, and considered superior to former Exhibitions, both in quality and quantity.

In pigs a large number was shown, and some were remarkably fine animals, and the number exceeded any former Exhibition.

The exhibition of manufactures, especially of agricultural implements, was the largest ever had. In carriages the display was excellent, and generally this class was well represented.

The plan now generally adopted in the States might, we think, be used here in this class to advantage; there no prizes are awarded, but every facility is afforded for manufacturers to exhibit their stock; and that is considered quite sufficient inducement for them to bring their

articles. It has been found to work well, and does away with a great deal of ill-feeling caused by incompetent judging.

In grain very good samples were shown. Some of our new varieties of fall wheat were remarkably fine, and could hardly be surpassed. Over a great portion of this County the intense heat of the latter part of the summer had a very unfavourable effect on the spring crops, seeming to blast the grain and making what promised to be a fine crop, comparatively worthless.

The yield of fall wheat was very light the past season, the unfavourable character of the weather at seeding in the fall of '69 retarded sowing very much, and many fallows could not be sown at all in consequence of the extreme wet, a great deal that was sown being put in very indifferently, turned out poorly.

* * * * *

The Exhibition of fruit, especially apples, was very fine and shows very fully the great advantages we enjoy in this County for the production of this now most important crop. The culture of fruit in this old Niagara District, we think, can still be largely increased, and while it is so interesting as well as profitable an occupation, we would strongly advise all with suitable ground to plant all the trees that they possibly can this coming spring; but it must be remembered that trees require as much care and as good cultivation as any other crop; and to simply plant and leave the rest to chance is worse than useless. Only the best trees should be chosen, and those of the most marketable varieties. Never buy or plant trees simply because they are cheap.

We would remark, in conclusion, the great amount of room there still is for improvement, especially in what a Yankee would call "fixing up." While there are many notable exceptions to this, still we find as a general thing that farmers are too careless and have no idea of improving the looks of their farms merely for the sake of appearance. This should not be so, for as the country grows older it should be the endeavour of each farmer to make the surroundings of his house and buildings attractive. But it can be said with truth that no class of people seem to care so little for appearances of this sort as farmers; many are content to go on in the same way as their fathers have done before them, and think what was good enough for them is good enough for us. We soon hope to see an improvement in this respect.

While we enjoy the blessings of peace and prosperity let us not stand still, but, as we have room, advance in the march of improvement, until we have shown to the world that we have, what we know we have, the finest County in this great Dominion of Canada.

Clinton.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		19 28	
“ Members' Subscriptions		123 76	
“ Admissions to Show		18 45	
“ Legislative Grant		122 30	
“ Municipal Grant.....		50 00	
“ Proceeds of Soiree		60 12	
		<hr/>	393 91
CR.			
By Prizes for Live Stock.....	95 50		
“ “ Field Products	23 15		
“ “ Dairy “	7 70		
“ “ Horticultural Products.....	13 25		
“ “ Agricultural Implements.....	2 25		
“ “ Arts and Manufactures.....	29 01		
		<hr/>	170 86
“ Preparing Show Grounds.....		4 00	
“ Working Expenses.....		105 83	
		<hr/>	280 74
Balance in hand			113 17

Grantham.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		37 79	
" 130 Members' Subscription.....		130 00	
" Legislative Grant.....		139 00	
" Municipal Grant ..		75 00	
		<u>381 79</u>	
Cr.			
By Paid County Society Treasurer for Union Show.....	322 22		
" Working Expenses.....	21 78		
		<u>344 00</u>	
Balance in hand.....			37 79

NOTE.—The Society held no Show, but united with the County for that purpose.

Grimsbj.

Dr.	\$ cts.	\$ cts.	\$ cts.
" 94 Members' Subscriptions		99 00	
" Admissions to Show.....		8 56	
" Legislative Grant		97 00	
" Municipal Grant.....		50 00	
		<u>254 56</u>	
Cr.			
By Prizes for Live Stock.....	121 50		
" " Field Products.....	28 25		
" " Dairy "	3 25		
" " Horticultural Products	15 38		
" " Agricultural Implements.....	6 50		
" " Arts and Manufactures.....	14 00		
	<u>188 88</u>		
" Preparing Show Grounds.....	5 00		
" Working Expenses.....	34 56		
		<u>128 44</u>	
Balance in hand.....			26 12

Louth.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		8 66	
" Members' Subscriptions.....		123 50	
" Admissions to Show		4 80	
" Legislative Grant.....		75 33	
		<u>212 29</u>	
Cr.			
By Prizes for Live Stock	91 00		
" " Field Products	12 50		
" " Dairy "	4 50		
" " Horticultural Products	18 37		
" " Agricultural Implements.....	2 00		
" " Arts and Manufactures	31 75		
	<u>160 12</u>		
" Working Expenses.....	31 50		
		<u>191 62</u>	
Balance in hand.....			20 67

REPORT.

* * *

In horses, as usual, the display was very creditable to the exhibitors, but the number was not equal to that of previous years, and not as many as we could have desired.

The show of cattle was rather meagre, but some very fine specimens of the Durham breed were exhibited by John Betts and F. R. Wilson. There are but very few thoroughbred cattle of any breed in the Township, but the people are beginning to see the necessity of infusing pure blood into our stock as a means of improving their size, form, and hastening their maturity, which are very essential points in stock raising. The show of sheep was not large, but some very fine specimens of "longwooled" sheep were exhibited by Messrs. Thompson, Cooke and Wyatt, the latter having imported some "Leicesters" from one of our noted stock breeders, which are remarkable for their great size and beautiful symmetry,

There were but few entries of swine, but what were exhibited were good specimens of their class,—the Suffolks were very fine. We notice with regret the almost total absence of agricultural implements, which should form a prominent feature in our shows; but as there are no large manufacturing establishments of this description in the Township, we cannot look for a large display. The show of grain and roots was unusually poor, both in quantity and quality, some classes not being represented at all, particularly in roots; but we assign the failure chiefly to the unfavourableness of the season for their growth. The horticultural display was very good, but not in such quantities as we could desire. We note with pleasure the increasing attention which is paid to fruit culture, which bids fair to be, at a period not far distant, quite an important crop to the farmers in this locality, judging from the immense quantities that are annually bought among us and sent to Montreal and the European markets. In the dairy department were to be seen some very fine samples of butter, which, judging from the appearance, was of an unequalled quality. Domestic articles and manufactures were very poorly represented, but what were on exhibition were of a quality not easily surpassed or even equalled. In the ladies' department were to be seen many articles that called forth the highest eulogiums of praise for the perfect taste and ingenuity displayed in their construction. The Directors gave a special prize for style and speed, which elicited quite a spirited competition among our fast men, but we think there is no real benefit the Society derives from offering such a prize. Underdraining is yet in its infancy in this Township, and we may say in the Province. A few, however, among us have tried it and speak very highly of the advantages resulting from it. Fertilizers are very scantily used beyond that which is derived from the barnyard. Farmers have not yet awakened to the vast importance of using any of the many fertilizers we have among us. Where they are used, ashes and plaster are the most common. In general, agriculture in this Township is not carried on as extensively or with as much profit as it might be, but we observe with satisfaction that a new order of things is being substituted for the old mode which was pursued by our predecessors, and we think and hope that the generous advantages held out by the Ontario Legislature and Bureau of Agriculture will greatly tend to the advancement of rural pursuits.

LONDON.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		1542	79
" 935 Members' Subscriptions.....		1909	50
" Admissions to Show.....		4294	94
" Legislative Grant.....		350	00
" Proceeds of Rents of Booths, Stalls, &c.....		656	31
" Interest on Deposits.....		127	06
		8880	60
Cr.			
By Prizes for Live Stock.....	1776	00	
" " Field Products.....	204	50	
" " Dairy "		87	00

	\$	cts.	\$	cts.	\$	cts.
By Prizes for Horticultural Products	208	50				
“ “ Agricultural Implements.....	292	50				
“ “ Arts and Manufactures.....	904	50				
	3473	00				
Unpaid.....	13	75				
			—	—	3459	25
“ Preparing Show Grounds.....					397	07
“ Working Expenses.....					1948	12
					—	—
					5804	44
Balance in hand.....					3076	16

NOTE.—The Society subsequently received on account of the Western Fair, \$625 from the East Middlesex Agricultural Society.

REPORT.

In placing the report before you, the Directors desire to congratulate you on the very favourable result of the past year.

As you are no doubt aware, the report for this year must not only show the proceedings of the City Society since their last annual meeting, but also place before you a full statement of the doings of the Western Fair Association for 1870, which was held under the auspices of the City Society and East Middlesex Agricultural Society, the Directors of both Societies taking part in the direction and management.

It may not be amiss here to revert back to the year 1868, as it was in that year the City Society first really took its place and prepared for action. And it was in that year the two Societies mentioned formed a union, from which sprang our Western Fair, the successful results of which have been a matter of astonishment from one end of Ontario to the other.

The Directors do not claim for themselves any special credit. It would be surprising if well directed efforts in a section of country so favoured as we are would not bring out the productions of the farmer and the enterprise of our manufacturers, to the front.

To the citizens of London the Directors would desire to tender their best thanks for the hearty good will and liberal manner in which they gave their assistance to the object in view.

In 1868 a balance was left in hand and deposited in the Bank of Commerce of \$1003.46; this, when drawn this year, amounted, with interest, to \$1087 00. The Treasurer's Account, when placed before you, will show the receipts from all sources during the year, including last year's balance, to be \$8880 60; and the disbursements \$5804 44—leaving a balance on hand of \$3076 16. And this without any contributions from the East Middlesex Society for this year. Their funds, which will probably amount to \$700, added to the above, will give in round numbers \$3,700 to start with this year (1871) without the subscription and Government grant to either Society for 1871, which, when added, may safely be placed at from \$5000 to \$6000 for a Western Fair this autumn.

It is most pleasing to the Directors to be able to state that neither of the Societies was called upon to contribute from their funds for the support of the Western Fair in 1870. It was self-supporting, only encroaching on the funds left from 1868. Thus:—

RECEIPTS.

Balance from 1868.....	\$	1003	46
Interest on do.....		83	54
		—	—
	\$	1087	00
Admission to grounds, &c.....		4294	94
Booths, stalls, &c.....		636	31
		—	—
	\$	6018	25

DISBURSEMENTS.

Amount paid as prizes.....	\$ 3459 25
“ “ Judges	177 00
Printing and Advertising.....	353 42
Sundry salaries—caretakers, gatekeepers, superintendence, rent, &c.....	1703 46
	<hr/>
	\$ 5693 13
Balance.....	325 12
	<hr/>
	\$ 6018 25

Leaving a balance of \$325 12 of Western Fair funds, pure and simple, with but few claims upon it; the prizes awarded being paid, less \$13 75 unclaimed.

The City Society's funds, as will be shown by the Treasurer's account when read (which are, however, included in the general account), will show :—

Receipts.....	\$ 3949 35
Disbursements.....	1198 31
	<hr/>
Balance on hand.....	\$ 2751 04
By adding to this the Western Fair balance, as above.....	325 12
	<hr/>
You have the balance of.....	\$ 3076 16

As shown in the general account to be placed before you.

The total number of entries for exhibition in 1868 was 2,037, and in 1870, 4,169, thus showing an increase for the past year of 2,132, being more than double that of the former year.

In briefly reverting to the Exhibition itself, your Directors would point with gratification to the show of horses on the grounds; the number of entries in this department alone being 612, and pronounced by competent judges to have been the finest exhibition hitherto seen in the Province; while in the other classes of farming stock the good qualities of animals have not been surpassed for breed and culture, thus proving that Western breeders are fully alive to their own interests and the requirements of the day. In other departments the excellence of the articles exhibited merit commendation, and were well calculated to promote emulation on the part of others engaged in the same kind of production.

Your Directors feel, in resigning office, that they can say “the Western Fair” is established. Like all undertakings of a similar character, its commencement was not unattended with difficulties; but these have vanished, and our Western farmers and mechanics will have henceforth an opportunity of competing with each other within a convenient distance of their own homes.

While your Directors cannot congratulate the members on the gathering of heavy crops during the past season, they feel that we all have much reason to be thankful to the great Disposer of all good for the many blessings we enjoy. Prosperity reigns amongst us both in town and country; we have a sufficiency for man and beast. We enjoy the blessings of peace, while other countries are devastated by the horrors of war. May these considerations make us trustful and thankful.

MIDDLESEX, NORTH.

Dr.	\$ cts.	\$ cts.	\$ cts.
To 307 Members' Subscriptions		307 00	
“ Admissions to Show		117 20	
“ Legislative Grant.....		700 00	
“ Private Donations.....		118 00	
		<hr/>	1242 20

CR.	\$	cts.	\$	cts.	\$	cts.
By Balance due Treasurer			70	73		
" Prizes for Live Stock	346	00				
" " Field Products	49	80				
" " Dairy "	18	50				
" " Horticultural Products	21	00				
" " Agricultural Implements	50	25				
" Arts and Manufactures	44	30				
	—	—	529	85		
" L. G. to Township Societies			420	00		
" Preparing Show Grounds			75	60		
" Wages for 1869			50	00		
" Working Expenses			147	94		
			—	—	1294	12
Balance due Treasurer					51	92

Adelaide.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			49	22		
" 53 Members' Subscriptions			53	00		
" Legislative Grant			52	20		
CR.			—	—	154	42
By Prizes for Live Stock	40	51				
" " Field Products	5	96				
" " Horticultural Products	2	10				
" " Agricultural Implements	2	25				
	—	—	50	82		
" Working Expenses			22	75		
			—	—	73	57
Balance in hand					80	85

Biddulph.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			24	14		
" Members' Subscriptions			114	00		
" Legislative Grant			112	80		
CR.			—	—	250	94
By Prizes for Live Stock	93	50				
" " Field Products	20	25				
" " Dairy "	4	50				
" " Horticultural Products	3	00				
" " Agricultural Implements	14	00				
" " Arts and Manufactures	12	00				
	—	—	147	25		
" Prizes of previous year			7	25		
" Preparing Show Grounds			18	00		
" Working Expenses			58	43		
			—	—	230	93
Balance in hand					20	01

Lobo.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			23	50		
" 52 Members' Subscriptions			52	00		

	\$ cts.	\$ cts.	\$ cts.
To Admissions to Show.....		5 00	
“ Legislative Grant.....		50 50	
		<u> </u>	131 00
CR.			
By Prizes for Live Stock.....	47 95		
“ “ Field Products.....	15 85		
“ “ Dairy “.....	3 60		
“ “ Horticultural Products.....	5 70		
“ “ Arts and Manufactures.....	9 90		
	<u> </u>	83 00	
“ Working Expenses		26 00	
		<u> </u>	109 00
Balance in hand.....			<u> </u> 22 00

McGillivray.

	\$ cts.	\$ cts.	\$ cts.
DR.			
To Balance in hand		26 65	
“ Members’ Subscriptions.....		83 00	
“ Admissions to Show.....		1 40	
“ Legislative Grant.....		79 20	
		<u> </u>	190 25
CR.			
By Prizes for Live Stock.....	106 50		
“ “ Field Products.....	15 00		
“ “ Dairy “.....	2 25		
“ “ Horticultural Products.....	2 25		
“ “ Agricultural Implements.....	5 50		
“ “ Arts and Manufactures.....	4 00		
	<u> </u>	135 50	
Unpaid.....		30 00	
		<u> </u>	105 50
“ “ of previous year.....		20 00	
“ Working Expenses.....		10 18	
		<u> </u>	135 68
Balance in hand.....			<u> </u> 54 57

Williams, West

	\$ cts.	\$ cts.	\$ cts.
DR.			
To Balance in hand.....		45 84	
“ 91 Members’ Subscriptions.....		91 00	
“ Admissions to Show.....		45 00	
“ Legislative Grant.....		74 20	
“ Miscellaneous Receipts.....		2 00	
		<u> </u>	258 04
CR.			
By Prizes for Live Stock.....	110 25		
“ “ Field Products.....	25 50		
“ “ Dairy “.....	7 00		
“ “ Horticultural Products.....	4 75		
“ “ Agricultural Implements.....	6 75		
“ “ Arts and Manufactures.....	25 25		
“ “ Ploughing Match.....	17 00		
	<u> </u>	196 50	

	\$ cts.	\$ cts.
By Prizes of previous year.....	8 50	
“ Preparing Show Grounds.....	16 10	
“ Working Expenses.....	35 35	
	<u> </u>	256 45
Balance in hand.....		<u>1 59</u>

Williams, East.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		4 09	
“ 56 Members' Subscriptions.....		56 00	
“ Legislative Grant.....		49 50	
		<u> </u>	109 59
CR.			
By Prizes for Live Stock.....	93 70		
“ “ Field Products.....	0 50		
“ “ Dairy “.....	0 50		
“ “ Horticultural Products.....	0 30		
“ “ Agricultural Implements.....	1 00		
“ “ Arts and Manufactures.....	1 50		
	<u> </u>	97 50	
“ Working Expenses.....		11 50	
		<u> </u>	109 00
Balance in hand.....			<u>0 59</u>

MIDDLESEX, EAST.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		32 81	
“ 465 Members' Subscriptions.....		469 00	
“ Legislative Grant.....		700 00	
“ Donation from Mr. Emery.....		15 00	
		<u> </u>	1216 81
CR.			
By Contribution to Western Fair.....	625 00		
“ L. G. to Township Societies.....	420 00		
“ Working Expenses.....	110 43		
	<u> </u>	1155 43	
Balance in hand.....			<u>61 38</u>

REPORT.

Our excellent Agricultural Act requires that the Directors of every Agricultural Society should, before their term of office expires, prepare a full and detailed Report of their proceedings during the year, together with such remarks and suggestions upon the agriculture, horticulture, arts and manufactures of the County, as they may deem to be useful.

These Reports are intended to give the Government the requisite assurance that the appropriation for the encouragement of agriculture has been faithfully expended for the objects contemplated, and also to enable the members to judge their officers by their acts and decide whether or not they are worthy of their confidence in the future. But while it is the duty of the Directors to make and present their Report, it is no less the duty of every member to attend the annual meeting, hear the Report, and vote, as he sees fit, for or against its adoption.

Annual Reports are expected to contain not only a record of the past year but also a programme of policy for the future; and, while it is proper that members by their votes should approve or condemn the past proceedings, it is still more important that they should exercise their judgment and strengthen the hands of their Directors by sanctioning the policy they consider most beneficial to the Society for the time to come.

The meagre attendance at our annual meetings is certainly not creditable to the absent members. We may perhaps take it for granted that this results in a great measure from their having perfect confidence in the present Board, and no desire for change. But we would remind you that blind confidence is not the best way to secure vigilant service.

The past season has been rather unfavourable for grain crops in this County. Although a large portion of this continent has suffered from drought, we have had a superabundance of heavy rain, that, combined with other causes, has made the grain crop in general, and the wheat in particular, very deficient in quantity and rather inferior in quality.

Still we may be thankful that the comparative failure of the wheat crop for some time past, has had at least one good effect.

It has taught the farmers of this County (a lesson much needed) to keep a larger portion of their land in pasture, and so prevent that deterioration of the soil which is the sure result of constant overcropping.

And we believe that farmers who have given it a fair trial have derived a larger income from stock raising or dairy farming, than they ever got from grain in the best of seasons. We believe that the general character of our live stock is constantly improving. Specimens were exhibited at the Western Fair that could scarcely be surpassed in any County, and thanks to the public spirited men amongst us, who have at great expense imported or raised pure blooded herds of cattle. Thoroughbred bulls are now so generally disseminated that almost every farmer who chooses can avail himself of their services.

We have also been fortunate that the active demand in the American market and the keen competition amongst cattle dealers, have secured for our farmers a fair remuneration for all their surplus stock. We hear with a great deal of apprehension that the Colorado Bug is steadily approaching this Province, and we would respectfully urge the Bureau of Agriculture to spare no pains to ascertain if any practical plan can be adopted to prevent it destroying a crop so important as the potato in this country.

You will recollect that in our last annual Report we gave you our reasons for anticipating that the Western Fair of 1870 would far excel that of 1868. We may now congratulate each other that our most sanguine expectations have been more than realized.

The Western Fair is now an established institution, and it should be our desire for the future carefully to guard and render permanent what has been so auspiciously commenced. It has now attained a standing in the popular estimation of Western Ontario that will render its management comparatively easy, and its success secure, as long as it rests upon the same broad and popular basis upon which it was first established. Managed as it has been by a joint Board composed of the Directors of the County and City Agricultural and Horticultural Societies, elected annually by the members and with exactly equal powers to each, it has secured a greater share of the confidence of the inhabitants of both City and County than could have been expected under any other system. People are extremely jealous of their power to control public affairs, however careless and indifferent they may seem in its exercise.

It would be impossible for the Western Fair to flourish, depending as it does entirely upon popular favour for its support, unless the people felt that it was directed as well as supported by themselves, and that whatever may be wrong they hold the supreme authority to apply the remedy.

It gives us great pleasure to testify to the zeal and ability of our associates in office, the Directors of the City Society. They certainly worked nobly to ensure success, grudging neither time nor labour to make the arrangements perfect.

Dorchester, North.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		49	61
“ 65 Members’ Subscriptions.....		83	00
“ Legislative Grant.....		74	42
		<hr/>	207 03

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock.....	90	50				
" " Field Products.....	21	75				
" " Dairy ".....	8	00				
" " Horticultural Products.....	3	00				
" " Agricultural Implements.....	1	00				
" " Arts and Manufactures	6	75				
			131	00		
" Working Expenses.....			18	15		
					149	15
Balance in hand.....					57	88

NOTE:—The Society appears to be progressing and the annual exhibitions improving. The last comprised 49 horses and 20 thoroughbred cattle, other classes in proportion.

London.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			177	44		
" 146 Members' Subscriptions.. ..			146	00		
" Admissions to Show.....			21	58		
" Legislative Grant.....			140	00		
" Municipal Grant.....			20	00		
					505	02
CR.						
By Prizes for Live Stock.....	250	50				
" " Field Products.....	15	75				
" " Dairy ".....	2	25				
" " Horticultural Products.....	5	00				
" " Agricultural Implements.....	2	00				
" " Arts and Manufactures.....	27	75				
" " Mowing Match.....	19	00				
			322	25		
" " of previous year.....			16	75		
" Working Expenses.....			59	69		
					398	69
Balance in hand.....					106	33

Nissouri, West.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			40	92		
" Members' Subscriptions.....			104	00		
" Legislative Grant.....			94	00		
					238	92
CR.						
By Amount of Premiums, Fall Show.....			165	41		
" Working Expenses.....			14	06		
					179	47
Balance in hand.....					59	45

Westminster.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			47	49		
" 118 Members' Subscriptions.....			127	00		
" Legislative Grant.....			110	63		
" Miscellaneous Receipts			12	00		
					297	12

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock.....	152	00				
" " Field Products.....	44	75				
" " Dairy ".....	5	25				
" " Horticultural Products.....	7	50				
" " Reaping and Mowing Match.....	25	50				
" " Ploughing Match.....	18	00				
			253	00		
" Working Expenses.....			41	25		
					294	25
Balance in hand.....					2	87

MIDDLESEX, WEST.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			72	60		
" Members' Subscriptions.....			106	25		
" Admissions to Show			37	53		
" Legislative Grant.....			700	00		
" Miscellaneous Receipts.....			50	00		
					966	38
CR.						
By Prizes for Live Stock.....	167	40				
" " Field Products.....	27	10				
" " Dairy ".....	15	20				
" " Horticultural Products.....	23	95				
" " Agricultural Implements.....	43	25				
" " Arts and Manufactures.....	27	90				
	304	80				
Unpaid.....	18	35				
			286	45		
" Prizes of previous year.....			30	05		
" L. G. to Township Societies.....			358	00		
" Preparing Show Grounds.....			59	10		
" Working Expenses.....			91	46		
					825	06
Balance in hand.....					141	32

REPORT.

* * *

The farming season of 1870 was unusually wet, inasmuch as to damage the spring wheat and pea crop, discolour barley and rot potatoes planted in clay soil.

The yield of spring wheat was less in 1870 than any year within the past ten years, and of an inferior sample to that usually grown in Middlesex, only producing about six bushels per acre as the average yield.

The fall wheat was more productive, yielding about twelve bushels per acre, but mostly of a red chaff variety of inferior quality. Since the fall wheat has been so much injured by the midge, red chaff varieties have been more sown, and believed to be less liable to the attack of the midge.

Oats were heavy in straw, but lighter in grain, than in former years, and were an average yield. Barley was an average yield, but much discoloured by wet weather. Peas ran too much to haulm or straw, to yield well. Roots, on high, sandy soils, were an average crop, but were drowned out in low and retentive lands. Hay was an average crop, but much

damaged by wet weather in curing. Fruit was an abundant crop, above the average of former years; it was larger in size, and ripened earlier than usual, with a fine fall for gathering: whereas in 1869 a large portion of the apple crop of Middlesex was lost by early frosts. Prices of all kinds of produce in 1870 have been remunerative.

Draining tiles are made in several places within the County, and underdrainage is more in favour, and more practised, than at any former time.

The Society held their Fall Show in September, which was largely attended, and was creditable to the Electoral Division, evincing progress and improvement, especially in domestic manufactures and animals, while the grain and root samples were inferior to those of former years. The show of Agricultural implements, carriages, waggons, and many other mechanical productions of West Middlesex, would do credit to many of the older Ridings or County Towns, proving that the mechanical enterprise and ability of West Middlesex is equal to that of its Agricultural progress.

* * * *

Caradoc.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		14 28	
“ Members’ Subscriptions.....		50 00	
“ Admissions to Show.....		4 50	
“ Legislative Grant.....		41 43	
		110 21	
CR.			
By Prizes for Live Stock.....	59 00		
“ “ Field Products.....	26 25		
“ “ Dairy “.....	3 00		
“ “ Horticultural Products.....	9 75		
	98 00		
Unpaid.....	15 45		
	82 55		
“ Working Expenses.....	25 30		
	107 85		
Balance in hand.....		2 36	

Ekfrid.

DR.	\$ cts.	\$ cts.	£ cts.
To Balance in hand.....		29 80	
“ 101 Members’ Subscriptions.....		101 10	
“ Admissions to Show.....		9 70	
“ Legislative Grant.....		72 25	
		212 85	
CR.			
By Prizes for Live Stock.....	95 80		
“ “ Field Products.....	17 50		
“ “ Dairy “.....	5 00		
“ “ Horticultural Products.....	3 90		
“ “ Agricultural Implements.....	6 25		
“ “ Arts and Manufactures.....	15 75		
	144 20		
Unpaid.....	41 45		
	102 75		
“ Working Expenses.....	31 13		
	133 88		
Balance in hand.....		78 97	

Metcalfe.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		30 84	
" 121 Members' Subscriptions		155 00	
" Legislative Grant.....		106 22	
" Proceeds Sale of Live Stock.....		68 50	
		<u>360 56</u>	
CR.			
By Purchase of Live Stock.....		335 79	
" Working Expenses.....		13 30	
		<u>349 09</u>	
Balance in hand.....			11 47

NOTE:—The Society held no show, confining its operations to the improvement of live stock.

Mosa.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		7 10	
" 246 Members' Subscriptions.....		247 00	
" Legislative Grant		140 00	
" Miscellaneous Receipts.....		8 37	
		<u>467 47</u>	
CR.			
By Prizes for Live Stock.....	145 75		
" " Field Products	26 00		
" " Dairy "	11 75		
" " Horticultural Products.....	13 30		
" " Agricultural Implements.....	16 75		
" " Arts and Manufactures.....	16 47		
" " Ploughing Match.....	17 00		
	<u>247 02</u>		
" Preparing Show Grounds	32 11		
" Agricultural Publications.....	10 80		
" Working Expenses.....	69 21		
	<u>359 14</u>		
Balance in hand.....			108 33

REPORT.

Your Directors have great pleasure in stating that the number of members was considerably increased during the year, amounting to 246, being an increase over the past year of 99 members.

The Annual Show was held in the Village of Wardsville. There were 850 entries made, but owing to the extreme wet summer, the spring crops have not by any means proved favourable, especially spring wheat and peas; roots and fruit were very good, and all the classes in stock were well represented, especially horses and sheep; farming implements, carriages and buggies were superior to any at our former shows; and the harness was excellent.

The ladies' work, in their department, added very much to our Show; which was in fact in almost every department a success. One very good thing in connection with our Society was the Ploughing Match, which took place on the 13th of November. It is to be regretted that more persons do not take an interest in these matches, as the benefits to be derived therefrom are very great.

We would suggest to farmers the necessity of underdraining their farms, as there would be a much greater benefit derived from the land if properly underdrained. We also consider that there is a great advantage to be derived by the changing of seed grain more frequently than is generally done in this section of country.

MONCK.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		244 86	
" Members' Subscriptions.....		143 00	
" Admissions to Show.....		262 87	
" Legislative Grant.....		700 00	
" Donation of Wellandport.....		400 00	
" " J. C. Rykert, M. P. P.....		10 00	
" " J. W. Overholt.....		6 00	
" Miscellaneous Receipts.....		20 00	
" Borrowed.....		500 00	
			2286 73

CR.			
By Prizes for Live Stock.....	224 75		
" " Field Products.....	74 34		
" " Dairy ".....	7 00		
" " Horticultural Products.....	35 58		
" " Agricultural Implements.....	30 00		
" " Arts and Manufactures.....	65 00		
		436 67	
" Premiums at Spring Show.....		84 00	
" L. G. to Township Societies.....		420 00	
" Preparing Show Grounds.....		283 00	
" Paid on purchase of Exhibition Grounds and Buildings.....		776 37	
" Working Expenses.....		246 55	
			2246 59

Balance in hand..... 40 14

REPORT.

After giving in detail the expenses of purchasing grounds at Wellandport, and erecting suitable buildings, the Report proceeds:—

Your Directors have much pleasure in stating that the annual show was held in the new Hall, on the Society's grounds, on the 14th and 15th days of October, and was a complete success. The weather was pleasant and the attendance was unusually large; the number of entries was about 1000, which, in proportion to the number of members, was much in excess of previous shows, as the County Society stood upon its own foundation, having no municipal aid nor merging of funds from branch Societies.

* * * *

The amount of prizes awarded and paid this year is 20 dollars and 42 cents in excess of the fall show of 1869, and for the spring show the difference is 38 dollars in favour of the present year. Also the receipts at the gate, &c., during the two days of show are 150 dollars and 50 cents in favour of the present year.

Your Directors have much pleasure in congratulating your Society on its success, thus far, they cannot but perceive that a growing interest is felt throughout the County, and you now have spacious grounds pleasantly situated in the centre of the County, and a well arranged Hall, all new, with substantial fixtures. With unanimity of action and perseverance, with the right men in the right places, we feel confident that your Society will rise to a place of fame not inferior to any County Society in the Province.

Caistor.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		27 30	
" 50 Members' Subscriptions.....		58 50	
" Legislative Grant.....		57 36	
" Municipal Grant.....		30 00	
			173 16

CR.		
By Prizes for Live Stock.....	79 25	
“ “ Field Products.....	16 05	
“ “ Agricultural Implements.....	11 00	
“ “ Arts and Manufactures.....	12 15	
	<hr/>	118 45
“ Agricultural Publications.....	14 25	
“ Working Expenses.....	19 55	
	<hr/>	152 25
Balance in hand.....		20 91

Dunnville, Canboro', and Sherbrooke.

DR.		\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....			90 06	
“ 159 Members' Subscriptions.....			159 25	
“ Admissions to Show.....			22 50	
“ Legislative Grant.....			154 60	
“ Municipal Grant.....			10 00	
			<hr/>	436 41

CR.		
By Prizes for Live Stock.....	158 25	
“ “ Field Products.....	39 75	
“ “ Dairy “.....	4 50	
“ “ Horticultural Products.....	7 75	
“ “ Agricultural Implements.....	9 00	
“ “ Arts and Manufactures.....	43 75	
“ “ Ploughing Match.....	19 00	
	<hr/>	282 00
Unpaid..	5 50	
	<hr/>	276 50
“ Preparing Show Grounds.....	31 50	
“ Working Expenses.....	49 45	
	<hr/>	357 45
Balance in hand.....		78 96

REPORT.

* * *

It is very gratifying to know that a deeper interest is being taken in agricultural matters by the residents of this section of the country, yet it appears to your Directors that there is still too much indifference manifested by those who are most directly benefited by the maintenance of agricultural associations, and it still remains a fact that the inhabitants of the village of Dunnville not only do the greater portion of the labour in connection with this Society, but also furnish a very large proportion of the funds.

* * *

The first Spring show of this branch was held in Dunnville, on the 21st day of April last. It was not so largely attended as your officers wished, but the horses exhibited were very good. The show of bulls was not large nor were the animals exhibited very good, but your Directors deemed it better, as this was the first Spring show, to allow them to compete for prizes than to rule them out, in order, if possible, to create a greater amount of interest among the stock growers, and in hopes that at another show animals of a superior class will be exhibited.

The fall show was held in Dunnville also, on Monday, the 17th day of October last, and, unlike the Spring show, was well attended and every department very well represented; the en-

tries numbered six hundred and twenty six, being an increase of one hundred and twenty five over the entries of 1869.

There was a very large and respectable attendance by others than members, which proves that the public at large are yearly becoming more deeply interested in all those things that tend to promote the wealth and prosperity of the country. With the exception of one or two trifling matters, beyond the control of your Directors, everything passed off harmoniously, and notwithstanding the difficulty experienced by the judges in arriving at decisions, owing to the keen competition in many of the departments, their various awards seemed to give general satisfaction.

Your Directors deemed it advisable to hold a ploughing match in the Fall, which took place on the farm of Mr Moses Walker, on the 16th day of November last. The attendance was not very large but the work done was of the very best description. The weather was very unfavourable; in the morning a violent snow storm was raging, which doubtless kept many away, and in fact, owing to the storm, your Directors scarcely expected any one, but on arriving at the place designated each class was fairly represented, and your officers deemed it best to let the match proceed. Nearly all the prizes offered were taken up, and under all the circumstances the match of 1870 was a very creditable affair.

Your Directors are of the opinion that the welfare of this Society would be materially advanced by extending its limits, and they confidently expect a very large addition to the present list of members, as well as in the amount of their subscriptions, if this were done. Your Directors would therefore recommend that this meeting take into calm and fair consideration the best method of extending the limits of the Society, or of admitting to membership parties residing beyond the present limits.

Owing to the growing scarcity of lumber in this section the item of preparing pens and fencing grounds is becoming yearly more expensive. Your Directors would therefore recommend that hurdles for pens and fencing be procured, of convenient size, so that they can be stored in small space, and which when wanted can be put up in a short time and at trifling expense. Those hurdles will not cost much more than we pay yearly for fencing, and if properly made will last for many years.

Gainsboro'.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		28 84	
“ 57 Members’ Subscriptions.....		57 00	
“ Admissions to Show.....		7 83	
“ Legislative Grant.....		54 44	
“ Municipal Grant		30 00	
Cr.			178 11
By Prizes for Life Stock.....	75 11		
“ “ Field Products.....	19 32		
“ “ Dairy “	3 86		
“ “ Horticultural Products	10 07		
“ “ Agricultural Implements.....	3 00		
“ “ Arts and Manufactures.....	14 45		
		125 81	
“ Working Expenses.....		27 36	
			153 17
Balance in hand.....			24 94

Pelham.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		29 46	
“ Members’ Subscriptions		102 00	
“ Legislative Grant.....		98 19	
“ Municipal “		75 59	
			305 24

CR.	\$	cts.	\$	cts.	\$	ts.
By Prizes for Live Stock	124	25				
“ “ Field Products	28	36				
“ “ Dairy “	6	75				
“ “ Horticultural Products	9	22				
“ “ Agricultural Implements.....	5	16				
“ “ Arts and Manufactures.....	28	36				
			202	10		
“ Working Expenses.....			33	45		
					235	55
Balance in hand					69	69

Wainfleet,

DR.	\$	cts.	\$	cts.	\$	cts.
To Members' Subscriptions.....			69	00		
“ Legislative Grant.....			55	41		
“ From Welland County Society, refunded.....			79	82		
“ Miscellaneous Receipts.....			3	59		
					207	82
CR.						
By Balance due Treasurer.....				2	00	
“ Prizes for Live Stock.....	89	50				
“ “ Field Products	18	15				
“ “ Dairy “	2	40				
“ “ Horticultural Products.....	5	30				
“ “ Arts and Manufactures.....	14	00				
			129	35		
“ Working Expenses.....			18	32		
					149	67
Balance in hand.....					58	15

NIAGARA.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			144	07		
“ 115 Members' Subscriptions.....			142	00		
“ Admissions to Show.....			31	50		
“ Legislative Grant.....			350	00		
“ Municipal Grant.....			120	00		
					787	57
CR.						
By Prizes for Live Stock.....	224	25				
“ “ Field Products.....	52	40				
“ “ Dairy “	14	25				
“ “ Horticultural Products.....	120	25				
“ “ Arts and Manufactures.....	42	25				
“ “ Growing Crops.....	18	00				
			471	40		
“ Prizes of previous year.....			45	00		
“ Preparing Show Grounds.....			9	05		
“ Agricultural Publications.....			20	01		
“ Working Expenses.....			97	25		
					642	71
Balance in hand.....					144	86

REPORT.

* * * * *
The Directors would at the outset unite in expressing their heartfelt thankfulness to a beneficent Providence for the peace which our Dominion enjoys, while every day reading of war and bloodshed at present raging in Europe.

Your committee are happy in having to report the Society to be in a flourishing condition, for, after adding the sum of eighty dollars to the prize list, the present year they still have a handsome sum remaining in the treasurer's hands.

* * * * *
The show of horses in their several classes, except carriage, was very good, the number of cattle shown was far in excess of last year, and a marked improvement in quality. The different classes of sheep were well filled and the prizes warmly contested for. A good display of pigs was also exhibited, altogether not the most numerous. The display of poultry was greatly in excess of the past Exhibitions held by this Society, and very much admired by the visitors. The different kinds of grain on exhibition was very good, there being a large number of entries of both white and red winter wheat, spring wheat being a crop very little cultivated in this division of late years. Barley and oats were very good indeed, considering the season not having been advantageous to those crops.

The corn crop, one of the staples of this division, was housed in fine condition and a large yield per acre which also added very much to the grain department of our show. The roots and other vegetable productions were not quite up to the standard of other years.

Fruits, mentioned last but not least, grown within the limits of the Society for this division, contribute largely towards filling the tables of the Provincial Exhibition, no matter in what part of the Province it is held. The apples were a very fine sample, and in some classes as high as forty entries were made of the same variety, it being a difficult matter for the Judges to decide in awarding the prizes. Pears not being quite so abundant a crop this season as the former, that department was not so well filled. The grapes made a good display, which would have done credit to a larger division than yours.

Your committee are desirous of expressing their thanks to J. C. Rykert, Esq., M.P.P., and Calvin Brown, Esq., of St. Catharines, and also our Secretary, Alex. Servos, Esq., for the special prizes offered by them at your fall show, Mr. Rykert, ten dollars, for the best collection of fruit; Mr. Brown, six dollars, for the best saddle horses; and Mr. Servos, six dollars, for the best pair of Leicester sheep.

NORTHUMBERLAND, EAST.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		185 56	
“ 84 Members' Subscriptions.....		84 00	
“ Admissions to Show... ..		21 06	
“ Legislative Grant.....		700 00	
“ Cramahc Society for use of Stallion.....		15 00	
		1005 62	
CR.			
By Prizes for Live Stock.....	291 75		
“ “ Field Products.....	38 90		
“ “ Dairy “	11 25		
“ “ Horticultural Products.....	5 60		
“ “ Agricultural Implements.....	18 50		
“ “ Arts and Manufactures.....	60 40		
	426 40		
Unpaid.....	6 62		
		419 78	
“ L. G. Township Societies.....		335 00	

	\$	cts.	\$	cts.	\$	cts.
By Working Expenses.....			121	31		
					876	09
Balance in hand.....					129	53

REPORT.

* * * * *

Your Directors thought it advisable and of advantage to the improvement of that useful animal, the horse, to hold a Spring Show of stallions; and, for the purpose of getting a good class of horses introduced in the Riding, they offered a prize of \$75 00 to be competed for by any stallion in the Province, whose owner would guarantee to travel said horse over the Riding, making a stand in each Township, for the season of 1870.

The Spring Show of stallions was held in the Village of Castleton, on the 20th day of April, 1870, and proved a complete success, although the day was wet and disagreeable. There were fifteen horses entered, and the prize of \$75 00 was awarded to W. Weld's horse, "Anglo-Saxon," from London, Ont. Your Directors think that the services of said horse will prove of great advantage to the improvement of the stock of horses in the Riding, as we are satisfied that a large number of the members of the Society availed themselves of his services.

Your Directors have great pleasure in reporting that the Fall Show of the Society, held in the Village of Warkworth, in the Township of Percy, was a success, and in all the different classes there was a marked improvement on former Exhibitions.

* * * * *

Your Directors are glad to report a marked improvement in horses, especially in colts, three years old and under. The Show was large and of good quality.

We also are glad to report that, in Durham and Ayrshire cattle, there were some very good thoroughbreds exhibited, which shows an enterprising spirit in those parties who have at a large expense brought them into the Riding.

The number of sheep, particularly Leicesters, was large and of excellent quality.

Pigs were good in quantity and quality, and much in advance of former years.

In grain and seeds the show was remarkably good, and some very fine roots were exhibited.

Your Directors feel satisfied in saying that the farmers in this Riding are competing keenly with one another in the improvement of their farms. The comparatively new or neglected farms for years past are now being rid of stones, and the massive pine stumps are being made into fences, and improved agricultural implements and labour-saving machines have for the last year or two, been introduced and almost universally used.

Your Directors cannot conclude without expressing their satisfaction of the attention now being paid to the raising of green crops, the benefits of which are universally felt in the feeding of stock and manuring the soil.

* * * * *

Brighton.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....				72	79	
" 102 Members' Subscriptions.....				102	00	
" Legislative Grant.....				81	00	
						255 79
CR.						
By Prizes for Live Stock.....	71	25				
" " Field Products.....	10	10				
" " Dairy ".....	1	50				
" " Horticultural Products.....	7	71				
" " Arts and Manufactures.....	29	02				
					119	58
" Agricultural Publications.....					62	50

	\$	cts.	\$	cts.	\$	cts.
By Working Expenses.....			30	05		
					212	13
Balance in hand.....					43	66

NOTE.—Although the Show did not come fully up to the expectations of the Directors, it was, “on the whole, an average one, and the entries rather in excess of previous years.”

		<i>Cramahé.</i>					
DR.		\$		cts.		\$	
To Balance in hand.....						63	
“ Members’ Subscriptions.....						129	
“ Legislative Grant.....						103	
“ Municipal Grant.....						23	
						318	
CR.							
By Prizes for Live Stock				92		25	
“ “ Field Products.....				13		60	
“ “ Dairy “				4		50	
“ “ Horticultural Products.....				7		15	
“ “ Agricultural Implements.....				3		75	
“ “ Arts and Manufactures				42		65	
“ “ Growing Crops.....				11		00	
				174		90	
“ Agricultural Publications.....				78		12	
“ Working Expenses				32		00	
						285	
Balance in hand.....						33	

REPORT.

The Directors in presenting their annual report feel pleased to convey to the members the fact that a decided improvement is perceptible in several important respects, compared with 1869. There was an increase in membership of 59, consequently an increase in finances, and as regards the number of entries at the Annual Exhibition there was an increase of 280—the total number for the current year being 804, while in 1869 it was 524.

* * *

In regard to the late Annual Exhibition your Directors have pleasure in stating that it would compare favourably with former years, each class on the prize list, with the exception of Class No. 15. being in general fairly represented. The ladies’ department was more extensive and superb than at any former exhibition.

* * *

In the opinion of your Directors it would be of more advantage than the very small prizes that the Society is now able to offer, to devote the money to the introduction of well bred stock, and they would venture to hope that the time is not far distant when cattle, especially male animals of all kinds, will not be allowed to run at large with impunity, a practice too long tolerated, but which ought not to be continued any longer.

Grain and roots were abundant, and of superior quality, and in domestic manufactures there was also a pleasing improvement.

Your Directors have pleasure in stating that since the last annual meeting a cheese factory has been built in a central locality, which they trust will prove profitable to stockholders and patrons, and a benefit to agriculture throughout the County.

* * *

		<i>Murray.</i>		
CR.		\$	cts.	\$ cts.
To Balance in hand.....				18 82
" Members' Subscriptions.....				60 00
" Admissions to Show.....				29 05
" Legislative Grant.....				44 00
" Municipal Grant.....				50 00
" Miscellaneous.....				63 00
CR.				264 87
By Prizes for Live Stock.....		106	85	
" " Field Products.....		21	98	
" " Dairy ".....		17	60	
" " Horticultural Products.....		22	68	
" " Agricultural Implements.....		10	50	
" " Arts and Manufactures.....		15	10	
		194	71	
Unpaid.....		19	01	
				175 70
" Working Expenses.....				27 42
				203 12
Balance in hand.....				61 75

		<i>Percy.</i>		
DR.		\$	cts.	\$ cts.
To Balance in hand.....				35 67
" 94 Members' Subscriptions.....		102	75	
" Legislative Grant.....		82	00	
CR.				220 42
By County Society for Exhibition.....		82	00	
" Agricultural Publications.....		52	75	
" Working Expenses.....		23	65	
				158 40
Balance in hand.....				62 02

NOTE:—The Society united with the County Society for a union fall show.

		<i>Seymour.</i>		
DR.		\$	cts.	\$ cts.
To Balance in hand.....				8 69
" 135 Members' Subscriptions.....		135	00	
" Admissions to Show.....		9	42	
" Legislative Grant.....		107	00	
CR.				260 11
By Prizes for Live Stock.....		43	75	
" " Field Products.....		29	75	
" " Dairy ".....		4	50	
" " Agricultural Implements.....		4	50	
" " Arts and Manufactures.....		9	40	
" " Ploughing Match.....		19	00	
				110 90
" Preparing Show Grounds.....		13	34	
" Agricultural Publications.....		84	38	
" Working Expenses.....		18	50	
				227 12
Balance in hand.....				32 99

NORTHUMBERLAND, WEST.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		64 23	
" 198 Members' Subscriptions.....		198 00	
" Admissions to Show.....		78 63	
" Legislative Grant.....		700 00	
" Municipal Grant.....		20 00	
" Miscellaneous Receipts.....		1 50	
		<hr/>	1062 36
CR.			
By Prizes for Live Stock.....	280 75		
" " Field Products.....	124 00		
" " Dairy ".....	17 00		
" " Horticultural Products.....	16 25		
" " Agricultural Implements.....	25 75		
" " Arts and Manufactures.....	82 00		
		<hr/>	545 75
" L. G. to Township Societies.....		352 73	
" Preparing Show Grounds.....		27 00	
*" Purchase of Pen and Inkstand.....		15 00	
" Working Expenses.....		56 00	
		<hr/>	996 48
Balance in hand.....			65 88

NOTE:—* "A gold pen and crystal inkstand were presented to Charles Bourn, Esq., as a token of esteem for twenty-one years faithful services as the Secretary of this Society."

REPORT.

The Directors of the West Riding of the County of Northumberland Agricultural Society have to report the number of members for 1870 as 198, being six more than last year.

In the spring, in connection with the Fair to which the Town Council of Cobourg contributed \$20, your Directors offered premiums for stud horses, fat cattle and sheep, and seed grain and seeds to the amount of \$48; and regret that, owing to the state of the roads at the time, the competition was not so great as might have been expected. The fall show was held for two days at Cobourg, which was well attended, and although the products exhibited were not so numerous as last year, they were of good quality. There were 1141 entries at the two shows, the amount offered was \$714, and the amount taken up was \$545.75.

The Directors are sorry that they cannot congratulate you on a prosperous season, as several of the crops have proved below an average, but at the same time they look forward hopefully, as the weather this fall has allowed the ground to be thoroughly prepared for an early sowing.

Alnwick.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		68 00	
" 60 Members' Subscriptions.....		60 00	
" Admissions to Show.....		16 62	
" Legislative Grant....		50 25	
		<hr/>	194 87
CR.			
By Prizes for Live Stock.....	51 75		
" " Field Products.....	15 20		
" " Dairy ".....	1 59		
" " Horticultural Products.....	2 90		
" " Agricultural Implements.....	8 25		

	\$ cts.	\$ cts.	\$ cts.
By Prizes for Arts and Manufactures	9 52		
" " Ploughing Match.....	14 50		
		103 62	
" Preparing Show Grounds.....		11 25	
" Working Expenses		8 15	
			123 02
Balance in hand.....			71 85

Haldimand.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		77 66	
" 98 Members' Subscriptions		98 00	
" Admissions to Show		67 62	
" Legislative Grant.....		82 08	
			325 36
CR.			
By Prizes for Live Stock	87 75		
" " Field Products	34 50		
" " Dairy "	9 00		
" " Horticultural Products	16 75		
" " Agricultural Implements	16 75		
" " Arts and Manufactures	54 00		
		218 75	
" Preparing Show Grounds.....		17 32	
" Working Expenses		34 47	
			270 54
Balance in hand.....			54 82

REPORT.

Your Directors, in presenting their Annual Report, take pleasure in stating that the Finances of the Society are in a favourable position. The Treasurer's Report, which will be laid before you, shows a balance of \$54 82 to the credit of the Society after paying all the expenses for the past year. With regard to other improvements, your Directors cannot speak so favourably. There is a falling off of members as compared with the year 1869, and it appears as though little interest was taken by the majority of farmers, in upholding a Society that has for its object (as all must confess) their individual and general benefit; and your Directors would urge upon this meeting the necessity of more united action and energy in those matters.

The Annual Show was held, as usual, in October last, and although some departments were not as well represented as on former occasions, yet, on the whole, the Show proved nearly as good as in former years.

Your Directors beg to report that the Cheese Factory, spoken of at the last Annual Meeting of this Society, is being built with all the latest improvements, and will compare favourably with anything of the kind in the United States or Canada. The building will be ready for business on the 1st of May next. This, of itself, will be a valuable acquisition to the farmers of this Township, as the wheat crop of late years has proved so unsatisfactory to all engaged in its production.

*

*

*

*

Hamilton.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		54 14	
" 226 Members' Subscriptions.....		276 75	
" Admissions to Show.....		40 00	

	\$	cts.	\$	cts.	\$	cts.
To Legislative Grant			140	00		
" Miscellaneous Receipts.....			3	70		
					514	59
CR.						
By Prizes for Live Stock	137	25				
" " Field Products	56	00				
" " Dairy	11	50				
" " Horticultural Products	13	00				
" " Agricultural Implements	13	75				
" " Arts and Manufactures	55	50				
" " Growing Crops.....	19	50				
			306	50		
" Preparing Show Grounds			18	50		
" Agricultural Publications.....			121	80		
" Working Expenses			38	50		
					485	30
Balance in hand					29	29

REPORT.

Your Directors in presenting their annual report feel pleased to inform you of the increased interest which has been shown in the Society the past year, the number of members being 226 and last year only 170. 203 members have been supplied with the *Canada Farmer* the past year, by each member taking the paper and paying \$1 25.

Throughout the Township all grain suffered much from the continuous dry weather, which commenced before the crops were matured and continued so long that it resulted in an inferior sample, yielding considerably below an average return. Hay was also much affected being about one-third less than an average crop; the root crop also in many places being very deficient compared with former years.

The fruit crop has been an average one, but a general complaint prevails (apples in particular) of fruit not keeping, those considered as winter not keeping later than fall apples usually do in ordinary years. The annual show was held in Cobourg, on the 11th of October, but, owing to the very heavy rain in the morning, a great many were prevented from attending, but the weather getting more favourable later in the day, most of the classes were pretty well filled, the animals and articles being of very fair quality. The sum paid in prizes was \$306 50.

A ploughing match was also held under the management of your Directors, on the 15th of November, and proved a success, being the greatest, in competition, of any held in the County. The amount offered in prizes was \$64 50, raised by subscription and collected by your Directors independent of the funds of the Society.

Cobourg Horticultural Society

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand			50	65		
" 99 Members' Subscriptions ..			99	00		
" Admissions to Show			53	81		
" Legislative Grant.....			80	40		
					283	86
CR.						
By Prizes for Fruits.....	33	00				
" " Flowers and Plants.....	50	00				
" " Vegetables	30	34				
			113	34		
" " Fine Arts and Ladies' Work.....			20	00		

	\$	cts.	\$	cts.	\$	cts.
By Preparing for Show.....			20	50		
" Working Expenses.....			27	25		
					181	09
Balance in hand.....					102	77

REPORT.

The Directors of the Cobourg Horticultural Society beg leave to report that during the past year, 1870, two exhibitions, as usual, have been held—viz: on the 14 of July and on the 20th of September last; at the first there were 312 entries, and at the second 275.

The Directors feel that much more might be done in Cobourg for the encouragement and promotion of horticulture than has been effected in the past, and they hope and trust that under the management of the Officers and Directors now to be appointed, much more will be accomplished in the future.

NORFOLK, NORTH.

DR.	\$	cts.	\$	cts.	\$	cts.
To 112 Members' Subscriptions			112	00		
" Admissions to Show.....			451	16		
" Legislative Grant			700	00		
" Municipal Grant.....			200	00		
" South Riding Society.....			3	00		
" Miscellaneous Receipts			52	00		
					1815	16
CR.						
By Balance due Treasurer.....			167	62		
" " Prizes for Live Stock.....	454	47				
" " Field Products.....	131	00				
" " Dairy	26	00				
" " Horticultural Products.....	22	00				
" " Agricultural Implements	14	25				
" " Arts and Manufactures.....	85	25				
" " Growing Crops	10	05				
			743	12		
" L. G. to Township Societies ..			367	50		
" Preparing Show Ground.....			413	30		
" South Riding Society			68	26		
" Working Expenses			110	44		
					1870	24
Balance due Treasurer.....					55	08

NOTE,—The North and South Riding Societies united for holding a Fall Show.

Middleton.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			30	97		
" Members' Subscriptions.....			132	00		
" Admissions to Show.....			6	00		
" Legislative Grant.....			140	00		
					308	97
CR.						
By Prizes for Live Stock.....	117	48				
" Field Products.....	42	18				

	\$	cts.	\$	cts.	\$	cts.
By Prizes for Dairy Products	4	00				
" " Horticultural Products.....	9	44				
" " Agricultural Implements.....	2	00				
" " Arts and Manufactures.....	26	35				
			201	45		
" Preparing Show Grounds.....			41	84		
" Working Expenses.....			6	25		
					249	54
Balance in hand.....					59	43

Townsend.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand.....			158	36		
" 119 Members' Subscriptions			119	00		
" Admissions to Show.....			15	50		
" Legislative Grant.....			140	00		
					432	86
CR.						
By Prizes for Live Stock.....	166	75				
" " Field Products	37	05				
" " Dairy "	8	81				
" " Horticultural Products.....	7	50				
" " Discretionary.....	5	15				
" " Arts and Manufactures.....	28	99				
			254	25		
" Preparing Show Grounds			26	97		
					281	22
Balance in hand.....					151	64

Windham.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand.....			40	17		
" 69 Members' Subscriptions.....			69	00		
" Admissions to Show.....			2	00		
" Legislative Grant.....			87	50		
					198	67
CR.						
By Prizes for Live Stock.....	78	00				
" Field Products.....	29	00				
" " Dairy "	5	00				
" " Horticultural Products.....	2	75				
" " Arts and Manufactures.....	14	00				
			128	75		
" Working Expenses.....			11	00		
					139	75
Balance in hand					58	92

NORFOLK, SOUTH.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand.....			181	26		
" Members' Subscriptions.....			95	00		
" Legislative Grant.....			700	00		
					976	26

CR.	\$	cts.	\$	cts.	\$	cts.
By Paid Treasurer of N. R. Society.....			329	73		
" L. G. to Township Societies			246	00		
" Purchase of Exhibition Grounds.....			64	59		
" Agricultural Publications.....			12	60		
" Working Expenses.....			74	90		
					727	82
Balance in hand.....					248	44

NOTE.—As this Society united with the North Riding, for the Fall Show, the particulars of prizes, &c, may be found in the Report of the latter Society.

Charlotteville.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			48	35		
" Members' Subscriptions			84	00		
" Legislative Grant			80	00		
					212	35
CR.						
By Prizes for Live Stock.....			92	15		
" " Field Products			25	30		
" " Dairy "			3	50		
" " Horticultural Products.....			3	67		
" " Agricultural Implements.....			4	00		
" " Arts and Manufactures.....			7	66		
					136	28
" Working Expenses... ..			14	40		
					150	68
Balance in hand.....					61	67

Walsingham.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand... ..			33	98		
" 57 Members' Subscriptions.....			58	00		
" Legislative Grant.....			56	00		
					147	98
CR.						
By Prizes for Live Stock.....			69	00		
" " Field Products.....			27	00		
" " Dairy "			6	25		
" " Horticultural Products.....			4	75		
" " Arts and Manufactures.....			7	25		
					114	25
Unpaid.....			4	75		
					109	50
" Prizes of previous year.....			10	25		
" Working Expenses.....			19	50		
					139	25
Balance in hand.....					8	73

Woodhouse.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			144	44		
" 110 Members' Subscriptions			110	00		

	\$	cts.	\$	cts.
To Admissions to Show		5	00	
" Legislative Grant	110	00		
			369	44
CR.				
By Prizes for Live Stock.....	152	82		
" " Field Products.....	33	70		
" " Dairy "	4	25		
" " Horticultural Products	13	84		
" " Agricultural Implements	1	00		
" Arts and Manufactures.....	12	12		
			217	73
" Working Expenses		41	95	
			259	68
Balance in hand			109	76

 ONTARIO, NORTH.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand			448	06		
" 161 Members' Subscriptions.....			294	00		
" Admissions to Show			323	35		
" Legislative Grant.....			700	00		
					1765	41
CR.						
By Prizes for Live Stock.....	330	00				
" " Field Products.....	69	00				
" " Dairy "	13	00				
" " Horticultural Products.....	32	00				
" " Agricultural Implements.....	112	00				
" " Arts and Manufactures.....	188	25				
" Growing Crops.....	18	00				
" Ploughing Match.....	153	00				
			915	25		
Unpaid.....	397	25				
			518	00		
" Prizes of Previous year			233	50		
" L. G. to Township Societies.....			419	85		
" Working Expenses			477	34		
					1648	69
Balance in hand					116	72

 Brock.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand			40	54		
" 91 Members' Subscriptions			91	00		
" Admissions to Show.....			20	83		
" Legislative Grant			54	10		
" Miscellaneous Receipts.....			17	00		
					223	47
CR.						
By Prizes for Live Stock.....	92	50				
" " Field Products	2	50				

	\$	cts.	\$	cts.	\$	cts.
By Prizes for Dairy Products	18	00				
" " Horticultural Products	7	75				
" " Agricultural Implements	7	50				
" " Arts and Manufactures	29	75				
			158	00		
" Refunded County Treasurer, error in Grant			14	60		
" Working Expenses			28	55		
					201	15
Balance in hand					22	32

Mara and Rama.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			21	90		
" Members' Subscriptions			198	50		
" Legislative Grant			99	28		
" Proceeds Sale of Live Stock			70	75		
CR.					390	43
By Prizes for Live Stock	58	25				
" " Field Products	12	65				
" " Dairy "	1	75				
" " Horticultural Products	11	75				
" " Agricultural Implements	2	00				
" " Arts and Manufactures	5	00				
	91	40				
" " Unpaid	32	15				
			59	25		
" Preparing Show Grounds			21	50		
" Purchase of Live Stock			262	85		
" Agricultural Publications			22	50		
" Working Expenses			27	93		
					394	03
Balance due Treasurer					3	60

Reach and Scugog.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			35	65		
" 108 Members' Subscriptions			108	00		
" Admissions to Show			18	00		
" Legislative Grant			65	00		
" Subscriptions for Ploughing Match			22	00		
					248	65
By Prizes for Live Stock	89	00				
" " Field Products	18	75				
" " Agricultural Implements	27	00				
" " Ploughing Match	59	00				
	193	75				
Unpaid	60	25				
			133	50		
" Prizes for Previous Year ..			30	75		
" Working Expenses			45	25		
					209	50
Balance in hand					39	15

		<i>Scott.</i>		
<i>Dr.</i>		\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....			35 03	
" 95 Members' Subscriptions.....			95 00	
" Admissions to Show.....			17 25	
" Legislative Grant.....			57 16	
" Miscellaneous Receipts.....			29 25	
				233 69
<i>Cr.</i>				
By Prizes for Live Stock.....		122 25		
" " Field Products.....		25 75		
" " Dairy ".....		8 00		
" " Horticultural Products.....		10 25		
" " Agricultural Implements.....		6 00		
" " Arts and Manufactures.....		14 75		
			187 00	
" Working Expenses.....			32 10	
				219 10
Balance in hand.....				14 59

REPORT.

The 7th Annual Fall Show of this Society took place at Leaskdale, on the 18th of Oct. last. The day was very stormy, which proved a great drawback to the success of the Show. The number of entries was less than previous years, but fully better as regards quality of live stock. The show of implements was very meagre, but the members decided at the last annual meeting to open this class to non-residents, with the view of inducing more competition. The show of roots was good, and the fruit excellent. Some good samples of grain were shown, notwithstanding that crop being a partial failure in Scott last year. The fall wheat was badly winter killed, many fields having scarcely a green stalk to be seen in them, in consequence of which the majority of farmers reploughed the ground and sowed again, some with barley which did very well, and some with spring wheat which did not succeed well, only in exceptional cases; those who ploughed up and sowed early had good crops; those who waited until late in the season to see what the fall wheat would be, and then resowed had very little for their trouble, the crop being much damaged by rust and blight. The fall wheat allowed to come to maturity yielded from 5 to 20 bushels per acre; spring wheat from 8 to 30 bushels per acre; barley average yield per acre 20 bushels—but quality rather inferior in many cases, owing to unfavourable weather for saving the crop; peas, slightly affected with mildew, average yield 18 bushels per acre; oats early sown good; late sown badly rusted, consequently a very inferior sample; the remarks applicable to oats will apply to the other spring grains as well. The early sown being much superior, both as regards quality and quantity. Hay crop a fair average. Root crops scarcely as good as last year. The old varieties of potatoes badly affected with rot. The new varieties, such as the early Goodrich, Harrison and Garnet Chili, wholly exempt from disease.

		<i>Thorah.</i>		
<i>Dr.</i>		\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....			68 08	
" 106 Members' Subscriptions.....			107 00	
" Admissions to Show.....			14 35	
" Legislative Grant.....			60 66	
" Miscellaneous Receipts.....			40 75	
				290 84
<i>Cr.</i>				
By Prizes for Live Stock.....		53 50		
" " Field Products.....		24 00		
" " Dairy ".....		6 00		

	\$	cts.	\$	cts.	\$	cts.
By Prizes for Horticultural Products.....	2	25				
" " Agricultural Implements.....	12	00				
" " Arts and Manufactures	22	25				
				120	00	
" Prizes of previous year				8	75	
" Working Expenses				36	31	
						165 06
Balance in hand						125 78

Uxbridge.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Members' Subscriptions.....			17	00		
" Admissions to Show.....			99	80		
" Legislative Grant.....			83	64		
					355	44
CR.						
By Balance due Treasurer.....				4	10	
" Prizes for Live Stock.....	174	50				
" " Field Products.....	36	25				
" " Dairy "	18	50				
" " Horticultural Products.....	17	50				
" " Agricultural Implements.....	30	25				
" " Arts and Manufactures.....	29	25				
" " Ploughing Match	27	00				
	333	25				
Unpaid.....	27	00				
				306	25	
" Ploughing Match.....				27	00	
" Working Expenses				78	20	
						415 55
Balance due Treasurer.....						60 11

ONTARIO, SOUTH.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand.....			707	65		
" 465 Members' Subscriptions			569	90		
" Admissions to Show			776	32		
" Legislative Grant.....			700	00		
" Miscellaneous Receipts			80	94		
					2834	81
CR.						
By Prizes for Live Stock	720	00				
" " Field Products	119	00				
" " Dairy "	56	00				
" " Horticultural Products	71	25				
" " Agricultural Implements.....	140	00				
" " Arts and Manufactures	174	00				
" " Miscellaneous.....	75	00				
				1355	25	
" " of previous year				23	00	
" L. G. to Township Societies.....				280	00	

	\$	cts.	\$	cts.	\$	cts.
By Preparing Show Grounds.....			356	53		
“ Agricultural Publications.....			71	87		
“ Working Expenses			273	92		
					2360	57
Balance in hand.....					474	26

REPORT.

* * * * *

The Officers and Directors of the County Agricultural Society, of South Ontario, beg leave to report that, during the past year, the Society has numbered 465 members, paying \$569 90, being an increase of 47 members and \$128 90 on members' subscriptions on the previous year. The second Turnip Hoeing Match, under the auspices of the Society, was held on Mr. John Dryden's farm, Lot 21, 6 Cons of Whitby, on Tuesday, the 12th day of July, 1870, when forty-five entries were made, and prizes amounting to twenty dollars were awarded.

The Exhibition fully sustained the character of South Ontario for progress and improvements, although there were 120 entries less than the previous year. The receipts at the gates were \$776, being \$72 in excess of previous year.

* * * * *

It is with pleasure that the Officers and Directors have to report the receipt of the following donations during the year, viz.: \$10 from John Dryden, Esq., President; \$5 from William Paton, Jr., Esq., Treasurer, and \$10 from George Robson, Esq., Secretary.

That since the last Annual Meeting the Society has obtained from the Corporation of the Town of Whitby, a new lease for twenty-one years, from the expiration of the present one, of the land formerly occupied, with an addition of about two acres, which, in connection with the old ground, is to be thoroughly drained during the present year by the town. Your Officers and Directors have substantially fenced the same at an expense of \$313 89.

Pickering.

Dr.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			202	00		
“ 353 Members' Subscriptions.....			396	00		
“ Admissions to Show.....			300	63		
“ Legislative Grant.....			140	00		
“ Miscellaneous Receipts.....			61	40		
					1100	03
Cr.						
By Prizes for Live Stock	336	00				
“ “ Field Products.....	63	00				
“ “ Dairy	9	00				
“ “ Horticultural Products	38	75				
“ “ Agricultural Implements.....	31	75				
“ “ Arts and Manufactures	123	00				
“ “ Turnip Hoeing Match.....	21	00				
	622	50				
Unpaid.....	82	05				
			540	45		
“ Preparing Show Grounds.....			140	00		
“ Prizes of previous year.....			151	40		
“ Working Expenses			139	50		
					971	35
Balance in hand.....					128	68

Whitby and East Whitby.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....				36		63
" 237 Members' Subscriptions				284		00
" Admissions to Show.....				205		93
" Legislative Grant.....				140		00
" Donations for Special Prizes.....				54		00
						<u>720 56</u>
CR.						
By Prizes for Live Stock.....		295		75		
" " Field Products.....		52		00		
" " Dairy "		17		00		
" " Horticultural Products.....		7		75		
" " Agricultural Implements....		36		00		
" " Arts and Manufactures.....		161		50		
" " Growing Crops.....		24		00		
				<u>594</u>		<u>00</u>
" Preparing Show Grounds.....				23		13
" Working Expenses.....				52		65
						<u>669 78</u>
Balance in hand.....						<u>50 78</u>

OTTAWA.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....				69		51
" Members' Subscriptions.....		1571		00		
" Admissions to Show.....		1569		00		
" Legislative Grant.....		350		00		
" Municipal and other Grants.....		1300		00		
" Miscellaneous Receipts, rents of stalls, provender, &c.		391		31		
				<u>5250</u>		<u>82</u>
CR.						
By Prizes for Live Stock.....		1792		50		
" " Field Products.....		182		00		
" " Dairy "		100		00		
" " Horticultural Products.....		122		50		
" " Agricultural Implements.....		118		00		
" " Arts and Manufactures.....		72		00		
				<u>2387</u>		<u>00</u>
" Paid on Grounds and Buildings.....		1793		99		
" Provender, Insurance, Printing, &c.....		597		82		
" Working Expenses.....		419		55		
				<u>5198</u>		<u>36</u>
Balance in hand.....						<u>52 46</u>

REPORT.

It affords your Directors pleasure to be able to congratulate the subscribers on the success attending the second Exhibition of the City of Ottawa Agricultural Society, held on the 21st, 22nd and 23rd of September, 1870. This success is all the more satisfactory considering the circumstances under which the exhibition was this year held; the earlier months of a most unfavourable summer having been followed by disastrous fires, which in August, 1870 took place throughout a great portion of the surrounding Townships, rendering it a matter of doubt whether a show should be attempted after a calamity so dire to the Ottawa country.

The announcement, however, having been made, it was deemed advisable to proceed with the exhibition, which took place as advertised; and it is pleasing to be able to report, was largely attended and very satisfactory in its results.

During the season considerable additions were made to the Exhibition Building, the space being nearly doubled, thus enabling a better classification of the products and manufactures exhibited in the Hall.

On the stock side, the sheds were also largely increased, and the attendance at the show fully justified all the expenditure thus incurred.

The bridge erected during the summer was also found to fully answer the purpose for which it was constructed, that of passing and re-passing between the grounds without the re-issue of tickets.

The work done in carrying out these improvements is of a very substantial kind, and as formerly, was performed under the superintendence of Mr. J. J. Smith, to the entire satisfaction of the committee in charge. The cost thus incurred was \$1,200, which with last year's outlay of \$3,648 97 for a similar purpose, will show the buildings and improvements carried out on the show grounds to have cost \$4,848 97. The whole expense of this year's improvements, together with \$950 on last year's account, have been paid out of this season's receipts, as well as the prize money and all incidental expenses connected with the exhibition. A balance remains due however, on last year's account of \$8,362 to Mr. J. R. Booth (for lumber) who has treated your Directors in this matter with commendable liberality. Another year's equal success will see the property entirely free from debt.

With regard to the success of the exhibition, it may be stated that the entries of horses and cattle in all classes, in 1870, were largely in advance of that of 1869, as was also those of poultry, for which, fortunately, increased accommodation had been made, while in sheep and swine a slight falling off was observable. In implements the display was not up to that of 1869, while in carriages and vehicles an improvement was manifest, both in the number exhibited and the workmanship displayed.

The exhibition room also indicated a falling off in some classes, while in others competition was spirited. Thus the ladies' work as a whole was poorly represented, while the dairy, the floral and other departments were greatly in advance of last season. Roots and vegetables, as might be expected from the drought which had prevailed, were in most instances inferior to those of the previous year.

The total number of entries was 1,185—32 less than that of last season—not a very serious falling off, all things considered. The number of exhibits was about the same as in 1869.

The receipts at the gate, \$1,376, showed a largely increased attendance of visitors, a result wholly unlooked for by your Directors, the number, exclusive of exhibitors, attendants, &c., being 6,428, as against 5,420 last season.

The Provincial Exhibition, it has been decided, will be held in Kingston, and not at Ottawa, as in our last report confidently predicted. The particulars of the voting on the occasion of the selection, having been already made public, need not here be dwelt upon. Sufficient to say that the investigation instituted and carried out by the Hon. Mr. Skead shows that, while Ottawa has not been fairly dealt with, no good could result to the interests of the Agricultural Association from further prosecuting their claim. When our time comes, which must be soon, Ottawa will be better prepared to meet the requirements and to guarantee a fuller accommodation. Although admittedly in all these respects far ahead of the city chosen, it will not do for Ottawa to make the exhibition, when it comes, a failure; so that by going on improving our show grounds and enlarging our accommodation, we shall be making success certain.

Your Directors, in concluding, beg to acknowledge the liberal manner in which aid has been granted by the City and County Councils, the County Council of Prescott and Russell, and the Agricultural Society of the County of Ottawa, as also by many of our leading citizens. Our earnest desire has been shown to establish at this city the nucleus of an agricultural association, alike creditable to Central Canada and of advantage to the interests of agriculture.

 OXFORD, NORTH.

Dr.	\$ cts.	\$ cts.	\$ cts.
To 286 Members' Subscriptions.....		286 00	
" Admissions to Show		271 00	
" Legislative Grant.....		700 00	
" Miscellaneous Receipts.....		31 00	
		<hr/>	1288 00
Cr.			
By Balance due Treasurer.....		73 37	
" Prizes for Live Stock	423 90		
" " Field Products.....	86 00		
" " Dairy.	31 00		
" " Horticultural Products	23 75		
" " Agricultural Implements.....	25 00		
" " Arts and Manufactures	76 75		
		<hr/>	666 40
" L. G. to Township Societies		408 45	
" Preparing Show Grounds.....		63 57	
" Working Expenses		188 68	
		<hr/>	1400 47
Balance due Treasurer.....			<hr/> 112 47

REPORT.

In common with a large majority of agricultural associations we have found the year 1870 unfavourable for the Autumn exhibition, arising partly from the peculiarity of the whole season, as affecting various crops and produce, and partly from wet and boisterous weather during the holding of the exhibition. We were particularly unfortunate in the latter respect both in the Spring and Fall. This was the principal local cause; but we are of the opinion that beyond this there is a growing desire for centralization or unity of effort, and a corresponding disinclination to patronise the numerous small exhibitions which absorb so much time and money with unsatisfactory results. The great success of the Western Fair has decided this point, and sooner or later it must necessarily result in the withdrawal of the Government Grant from Township and Electoral Division Societies, and supplement County and District Societies only, with an International Exposition once in five or six years. This is a suggestion of the *Hamilton Times*, and responded to largely in other localities.

Your Directors are impressed with the conviction that under the present system great achievements cannot be accomplished, and it is only by great energy and extra efforts of the Directors, that the present position of the Society can be maintained. It may be interesting on this occasion to present a few figures, showing the results of the last decade, which, though less progressive than we would wish, are by no means discouraging; at least a gradual progress has marked its course.

Years.	No. of Members.	Paid in Prizes,	Fees from Non Members.
1860	129	\$248	....
1861	137	325	.....
1862	143	310	.....
1863	123	284	.....
1864	161	344	\$102
1865	161	353	157
1866	195	370	133
1867	296	565	120
1868	328	600	181
1869	313	626	194
1870	284	666	271

As seen by this table, nearly three times as much was paid for prizes in 1870 as was paid in 1860. The membership much more than double. In 1863, our buildings were almost use

less; they are now worth \$1200. The membership was smaller last year than the two previous years, which may be accounted for readily. Firstly, by the absence of special prizes, which, in the years preceding, attracted such a large number of competitors. Secondly, there was no reaper trial as in 1858, or stallion patronized by the Society as in 1857; and, thirdly, the wet weather on both days of the Show prevented a large number coming from a distance. On the Saturday evening previous to the Fall Exhibition more members and entries were recorded than on any previous occasion, and had the weather been fine our Exhibition, no doubt, would have been the largest ever held in Woodstock. With respect to the Spring Fair, we are safe in saying it was the most successful that the Society ever held. The show of stallions was particularly full and good, and the number of entries in grain creditable.

* * * * *

As we have before stated, the Autumn Exhibition, in numbers, was not as large as we had anticipated, but in the quality of its productions, it was never surpassed. The entries in live stock were more numerous, and, on the whole, of better quality than at any time previously, especially in thorough-bred cattle, which elicited the admiration of the judges as well as spectators. The only departments particularly deficient were the dairy produce and ladies' work. The roots, fruit and grain were excellent and abundant.

The system of collecting fees at the gate, instead of at the hall door, was adopted last year and resulted in a large increase of funds, which, no doubt, would have been nearly doubled had the weather been fine. As the Directors were prepared to expect, considerable dissatisfaction was expressed by some, who looked upon the charge of an entrance fee as an innovation of their long enjoyed privileges; while in nearly every other place the fee is paid with apparent pleasure. The only change your Directors would suggest, would be the appointment of one of their number to attend the entrance, with discretionary power to admit a reasonable number of herdsmen free of charge.

* * * * *

Blandford.

Dr.		\$	cts.	\$	cts.	\$	cts.
To Balance in hand				12	00		
“ 156 Members’ Subscriptions.....				157	25		
“ Legislative Grant				86	65		
						256	20
Cr.							
By Wilmot Agricultural Society.....				200	00		
“ Working Expenses.....				32	31		
						232	31
	Balance in hand.....					23	89

NOTE.—This Society united with that of the Township of Wilmot, South Riding of Waterloo, for a Fall Show.

Blenheim.

Dr.		\$	cts.	\$	cts.	\$	cts.
To Balance in hand				242	26		
" 277 Members' Subscriptions				277	00		
" Admissions to Show				33	00		
" Legislative Grant				140	00		
" Special Prizes at Spring & Fall Show, Ploughing Match, &c.				178	75		
						871	01
<hr/>							
Cr.							
By Prizes for Live Stock		273	25				
" " Field Products		52	00				
" " Dairy "		13	50				
" " Horticultural Products		32	50				
" " Agricultural Implements		44	50				
" " Arts and Manufactures		34	00				

	\$ cts.	\$ cts.	\$ cts.
By Prizes for Ploughing Match.....	55 50		
“ Working Expenses		505 25	
		133 76	
			639 01
Balance in hand.....			232 00

REPORT.

*

*

*

We are happy to state that much of the former ill-feeling which existed among many members of our Society has subsided, and many who were once opposed to it are now ready to uphold our hands, and assist in keeping the Blenheim Show among the foremost Townships Shows in the Dominion.

It is not our intention to present you with a voluminous report of dry details, nor yet will we drag in foreign subjects, but simply say that, allowing for the excessively rainy day on which our Show was held, it may fairly be considered a success.

The Spring Fair, in connection with your Society, was all that could be desired. The show of horses was excellent. There was a fine sample of grain brought forward; much competition, and considerable seed grain changed hands.

We do not wish to disguise the fact that the number of entries, especially in Agricultural products, has been less than in 1869; but the evident cause of this is clearly traceable, not to any waning prosperity in the Blenheim Show, but to the simple fact that the harvest of grain, roots, &c., was not as abundant as it was in 1869.

*

*

*

The fruit, grain and live stock of Blenheim cannot be easily excelled by any Township in the Dominion; but we do not wish to make any invidious distinction by particularizing the names of parties who excelled in these things. Another pleasing feature in connection with our Show was the prize given to the best field of turnips; the raising of large crops of these esculents should be encouraged, as it has a tendency to produce much valuable manure thus keeping the land in a proper state of fertility.

With respect to the Annual Ploughing Match, your Directors, acting upon intimations previously received, would suggest that you appoint a committee, at your Annual Meeting, for the purpose of getting up and carrying on the said Ploughing Match, and we would further suggest that it be carried on quite independently of the Society, with no entries concerning it in the Secretary's Books.

*

*

*

*

Nissouri, East.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		29 39	
“ 78 Members' Subscriptions.....		78 00	
“ Legislative Grant.....		35 46	
			142 85
Cr.			
By Prizes for Live Stock.....	81 00		
“ “ Field Products	14 25		
“ “ Dairy “	3 75		
“ “ Horticultural Products	3 00		
“ “ Agricultural Implements.....	3 00		
“ “ Arts and Manufactures	5 25		
		110 25	
“ Working Expenses		25 25	
			135 50
Balance in hand.....			7 35

Zorra, East.

DR.		\$ cts.	\$ cts.	\$ cts.
To	119 Members' Subscriptions.....		137 00	
"	Legislative Grant.....		70 00	
"	Miscellaneous Receipts.....		1 25	
			—	208 25
CR.				
By	Balance due Treasurer.....		4 55	
"	Prizes for Live Stock.....	93 00		
"	" Field Products.....	19 60		
"	" Dairy ".....	6 00		
"	" Horticultural Products.....	4 00		
"	" Agricultural Implements.....	2 00		
"	" Arts and Manufactures.....	14 80		
"	" Growing Crops.....	10 50		
		—	140 30	
"	Preparing Show Grounds.....		5 00	
"	Working Expenses.....		30 31	
			—	188 96
	Balance in hand.....			19 29

REPORT.

* * * *

In concluding this Report, the Directors would take occasion to refer to the growth of cheese manufacture in the Township. Although its origin here, comparatively speaking, is but of yesterday, it has already developed into surprising magnitude, and the probability is it will go on increasing. There are already 12 factories in the Township, besides 3 on its confines, which are patronized by farmers in the Township. We learn, from careful enquiry, that upwards of 400,000 lbs. of cheese have been manufactured and sold by the factories in East Zorra, and that there has been realized for it the handsome sum of nearly \$50,000. We cannot help congratulating our brother farmers on this source of income; but for it a financial pressure arising from the failure of the cereal crops would have borne us down. It, however, has supplied the needful, and relieved us from the burden of debt accumulations. And now in regard to the prosecution of this branch of farming, we unhesitatingly recommend perseverance in it. Hitherto it has been profitable, and we see no reason why it should not continue to be so. A large increase in the production of the article may threaten to affect its price; but, although, something less than 11½ cts. per lb. be received for a season's cheese, it would still be the most lucrative branch of farming. The pecuniary receipts of the farmer will be favourably affected by it, both directly and indirectly. In order, however, to reap all the monetary good which its prosecution is fitted to yield, it is absolutely necessary to produce a prime exportation article. Canadian Cheese in the London and Liverpool markets do not, except in rare instances, command the highest quotations. In the business circulars of London Houses it is classed as middling quality, and is quoted from 2s. to 3s. per cwt. below U. S. Factory Cheese. A Liverpool House, when asked the question, "Why does Canadian Cheese not bring Cable quotations?" replied: "It is only U. S. fancy dairies which are sold at these extreme prices." And a Glasgow circular, of 21st Dec., 1870, quotes Canadian Factory Cheese at 60s. per cwt. (112 lbs.) a figure fully 10s. below the cable quotations of that date. Now, it will not do to say that this state of things is the result of conspiracy to depreciate the Canadian article, neither will it do to say that inferior U. S. cheese is branded Canadian, and our finest is sold as U. S. for, comparatively speaking, a very small proportion of the Canadian products is now handled by New York merchants. We believe that the truth of the matter is this, the disparity between the market price of Canadian and U. S. Cheese is due to our article not being, generally speaking, quite the thing as regards quality. The kind of cheese which commands the highest price in the English market is close in texture, *i. e.* not porous, will slice in thin pieces without falling into crumbs, is mild in flavour, and in colour is either pure white or a pale red, the pure white suiting the Lancashire market, and the high coloured the London. Again and again have we heard from the best authorities that straw

coloured cheese (the ruling shade in our product) is the most unsaleable that can be shipped. To produce this class of article is as much in our power as it is in our New York neighbours. We have as good cows, as good pasture, and as favourable a climate. Why then should we not do so? Let the patrons of factories be watchful of the quality and condition of the milk contributed by them. Skimmed, or sour milk, or milk impoverished by the retention of the strippings of the cows ought never to be sent to the factory. And let the factory "Boss" devote his undivided attention to its proper manipulation in the vat, studying carefully to catch the curds at the proper acid, and to colour it (if he desires to colour it at all) to a high golden tinge, with the best annatto he can procure, and let him attend most particularly to the *proper curing of the cheese*, and our manufacture will, no doubt, equal theirs, and command as high a price. We would take the liberty of here remarking that it is very short-sighted policy on the part of patrons of factories to under pay the manufacturer, and that it is equally wrong in factorymen to underbid each other for the milk. Considerable capital is invested in a properly constructed factory; it is not every shanty or improvised "lean to" that is fit for the manufacture and curing of cheese. Moreover it requires skill, close application, and heavy, protracting labour. Now, no man ought to be expected to expend his capital and skilled labour without being adequately remunerated. If he is not, a want of heart in the work is induced, and the result is prejudicial to the interest of the patrons. Moreover, if the manufacturer is fully paid, then the patrons, with some show of justice and fair play, can and ought to demand from his hands an A 1 article. It occurs to us to refer here also to the disposition of a few individuals to start private dairies. Self appropriation of all the profits is of course the temptation to do so. But unless the farmer has a sufficiency of cows to make a good sized cheese a day, and unless he has the necessary skill and labour in his own family, and is so situated that he can afford to make cheese dairying his hobby, the extra profit is altogether imaginary. Besides in the cheese market dairy cheese and factory cheese are classed separately, and the former at a much less market value than the latter. On questioning an experienced old country cheese merchant as to the reason of this state of things, and urging as an argument against the rightfulness of such a distinction the fact that the milk at a private dairy was more likely to be in a better condition for making a good article, he replied, "The reason of the difference is that a greater uniformity of quality was found to exist in factory cheese." Now, while we by no means say that the starting of a private dairy is in all circumstances inexpedient, we do say that every thing considered the supporting of a well conducted factory to which the milk is not drawn from too great a distance is the best course to follow. The error must also be avoided of planting factories too thickly. Too much competition is injurious to this business. Set up two factories in a section of country where one is sufficient, and the running of both will very likely be less profitable to all parties concerned. There is another matter worthy of notice. This year's experience in the business shows to the directors of factories, and others in whom the power of sale is invested, the propriety of making sales as soon as the cheese is fit for exportation, especially the summer made cheese. To hold on to them with the expectation that they will command a better price as the season closes is a great mistake. Late advices from England state that large quantities of *over-kept* U. S. and Canadian cheese have been sold at 56s. per cwt., which is nearly 20s. below the price of the finest.

Zorra, West,

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		45 41	
" 135 Members' Subscriptions		145 50	
" Legislative Grant		75 76	
" Municipal Grant		20 00	
" Miscellaneous Receipts.....		12 56	
		299 23	
Cr.			
By Prizes for Live Stock.....	84 00		
" " Field Products.....	29 75		
" " Dairy "	13 75		
" " Horticultural Products.....	7 00		
" " Agricultural Implements.....	3 50		

	\$ cts.	\$ cts.	\$ cts.
By Prizes for Arts and Manufactures	17 00		
" " Growing Crops.....	24 50		
" " Ploughing Match.....	15 50		
		195 00	
" Preparing Show Grounds.....		8 50	
" Prizes of previous year.....		1 50	
" Working Expenses		34 13	
			239 13
Balance in hand.....			60 10

NOTE.—The show went off satisfactorily and the same may be said of the ploughing match and field competition in roots, all of which are well calculated to advance the cause of agricultural improvement.

OXFORD, SOUTH.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		34 81	
" 104 Members' Subscriptions.....		104 00	
" Legislative Grant.....		700 00	
" Donations for Special Prizes.....		56 50	
" From South Norwich Society for Union Show.....		362 00	
			1257 31
CR.			
By Prizes for Live Stock.....	365 00		
" " Field Products.....	66 25		
" " Dairy "	41 50		
" " Horticultural Products.....	30 50		
" " Agricultural Implements.. ..	73 25		
" " Arts and Manufactures....	128 50		
		705 00	
" L. G. to Township Societies.....		420 00	
" Paid South Norwich Society.....		78 25	
" Working Expenses.....		20 28	
			1223 53
Balance in hand.....			33 78

Dereham.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		2 28	
" 204 Members' Subscriptions.		230 25	
" Admissions to Show		165 30	
" Legislative Grant.....		71 27	
" Miscellaneous Receipts.....		25 00	
			494 10
CR.			
By Prizes for Live Stock....	176 50		
" " Field Products.....	34 00		
" " Dairy "	23 00		
" " Horticultural Products.....	19 25		
" " Agricultural Implements.....	26 25		
" " Arts and Manufactures.....	26 00		
		305 00	

	\$ cts.	\$ cts.	\$ cts.
By Preparing Show Grounds.....		45 20	
" Agricultural Publications.....		8 25	
" Working Expenses.....		120 20	
		<u> </u>	478 65
Balance in hand.....			15 45

Norwich North.

	\$ cts.	\$ cts.	\$ cts.
To Balance on hand.....		123 26	
" Membership's subscription.....		277 00	
" Admission to Show.....		213 60	
" Legislative Grant.....		79 53	
		<u> </u>	693 39

CR.			
By Prizes for Live Stock.....	227 75		
" " Field Products.....	42 50		
" " Dairy.....	18 50		
" " Horticultural Products.....	17 25		
" " Agricultural Implements.....	51 75		
" " Arts and Manufactures.....	39 00		
	<u> </u>	396 75	
" " Preparing Show Grounds.....		48 01	
" " Working Expenses.....		123 34	
		<u> </u>	568 10
Balance in hand.....			125 29

Norwich South.

DR.	\$ cts.	\$ cts.	\$ cts.
" To Balance in hand.....		119 30	
" 279 Members' Subscriptions ..		414 12	
" Admissions to Show.....		233 85	
" Legislative Grant.....		112 15	
" Miscellaneous Receipts.....		142 71	
		<u> </u>	1022 13

CR.			
" By Paid on Exhibition Building.....	340 19		
" " Purchase of Seed.....	157 00		
" " County Treasurer.....	363 50		
" " Working Expenses.....	123 01		
	<u> </u>	983 70	
Balance in hand.....			38 43

NOTE—The Society united with that of the South Riding in holding a Fall Show, which was very successful.

REPORT.

Although it could hardly have been expected, at this time last year, that the South Riding Society would have united with this Society the past year, from the fact that they united with us only two years ago; but from the very liberal offers made by your Directors, and the superior accommodations which your Society now has for holding a large exhibition, their offer was accepted by the County Society, and we may safely state that the show was a success.

Although our list of members was not quite so large as that of 1868, still it is in advance of 1869 by twenty members.

We find by the Treasurer's Report a balance on hand of \$38.43, which, after taking into consideration that your Society has the past year expended the sum of \$215.00 for a refreshment house erected in the Show grounds, and have also reduced the old debt of the Society some \$100.00 now leaves your Society in debt only to the small amount of \$200.00. Your Directors feel that in handing over the affairs of the Society to the new board of Directors, they leave everything in a very satisfactory position.

Your Directors would also beg to urge upon their successors the propriety of having a large number of trees planted upon the ground, for they consider that nothing can be done which will beautify and benefit the ground more, and when once planted and proper care taken of them they will be of no further expense to the Society.

Oxford, North and West.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			6	12		
" 333 Members' Subscriptions.....			333	00		
" Admissions to Show			215	85		
" Legislative Grant			103	37		
" For Special Prizes.....			241	75		
" Amount Borrowed.....			1,100	00		
" From Wm. Allison			100	00		
" Miscellaneous.....			152	00		
			—		2,252	09

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock	229	00				
" " Field Products	49	50				
" " Dairy "	43	25				
" " Horticultural Products.....	17	50				
" " Agricultural Implements	42	25				
" " Arts and Manufactures	113	00				
" " Ploughing Match	71	85				
	—		566	35		
" Preparing Show Grounds			294	50		
" Purchase of Grounds and Exhibition Buildings			997	83		
" Working Expenses			218	66		
			—		2,077	34
Balance in hand.....					174	75

Oxford. East.

DR.	\$	cts.	\$	cts.	\$	cts.
To 84 Members' Subscriptions			231	40		
" Legislative Grant			53	66		
" Borrowed			255	10		
" Miscellaneous Receipts			4	00		
			—		544	16
CR.	\$	cts.	\$	cts.	\$	cts.
By Balance due Treasurer ..			24	62		
" Purchase of Live Stock			368	71		
" Paid borrowed money.....			98	60		
" Agricultural Publications.....			15	75		
" Working Expenses			21	48		
			—		529	16
Balance in hand.....					15	00

PEEL.

	\$ cts.	\$ cts.	\$ cts.
Cr.			
To Balance in hand.....		863 60	
" Members' Subscriptions		421 00	
" Admissions to Show		704 35	
" Legislative Grant		700 00	
" Municipal Grants		189 00	
" Miscellaneous Receipts		150 00	
		<u>3,027 95</u>	
By			
Prizes for Live Stock	620 00		
" " Field Products	100 50		
" " Dairy "	46 50		
" " Horticultural Products	72 50		
" " Agricultural Implements	161 50		
" " Arts and Manufactures	173 75		
" " Ploughing Match	52 00		
	<u>1,226 75</u>		
Unpaid	120 50		
		<u>1106 25</u>	
" L. G. to Township Societies		280 00	
" Preparing Show Grounds		170 54	
" Prizes of previous year		69 00	
" Working Expenses		324 96	
		<u>1,950 75</u>	
Balance in hand			1,077 20

REPORT.

The Spring Fair was held on the 27th of April. Although the number of entries was not larger than at the fair of the previous year, yet considerable improvement was apparent in the quality of the stock exhibited. The sum of \$126 was awarded as premiums for stallions and thoroughbred bulls.

The Fall Exhibition, which was held on the 28th and 29th days of September, was by far the most successful one ever held by the Society. The number of articles entered for exhibition reached 2500, an increase of 500 over that of last year and 1000 over that of any previous year of the Society's existence. The sum of \$704 35 was received at the gates for the admission of non-members, a sum which has not been exceeded by the receipts from that source of any other County Society in the Province. The unprecedented success of this exhibition, both in the quality and number of the articles exhibited and in the number of visitors who attended it, affords a satisfactory index of the increasing interest taken by the farming community and by the general public in the improvement of farming stock and products, and in domestic manufactures and agricultural implements.

The number of people attending the Fall Exhibition of the Society is the source of a large portion of its revenue, and it is gratifying to us to be able to state that the receipts from this source are increasing every year.

As the accommodation for exhibitors during the Fall Fair of 1869 was exceedingly limited, and as large additions had been made to the prize list during the past year it became necessary to increase the accommodation, which your Directors did by erecting, at a cost of about \$100, a root shed extending the whole length of the west side of the main Exhibition Building, and a poultry shed on the eastern side thereof. Even with these extensive additions to the former buildings all the available space was occupied, and if in future the number of entries increase in the same ratio as in the past few years, it will be necessary to make still further additions to the buildings in order to be prepared for the next Fall Exhibition.

* * * * *

A ploughing match was held by the Society at Derry, West, in October last, at which

the sum of \$52 was awarded in premiums. It is to be regretted that, owing to unforeseen circumstances, the match was not a successful one. The fact of one having been held at Edmonton on the previous day, at which much larger sums were offered as premiums than your Directors thought it advisable to offer, was a circumstance which militated strongly against the success of the Society's match.

Toronto.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			194	03		
" 259 Members' Subscriptions.....			299	00		
" Admissions to Show			99	47		
" Legislative Grant.....			140	00		
" Municipal Grant.....			100	00		
" Miscellaneous Receipts.....			7	50		
					840	00
CR.						
By Prizes for Live Stock.....	266	00				
" " Field Products.....	80	00				
" " Dairy	36	50				
" " Horticultural Products.....	22	00				
" " Agricultural Implements.....	57	00				
" " Arts and Manufactures.....	111	50				
	573	00				
Unpaid.....	10	00				
			563	00		
" " of previous year.....			7	00		
" Preparing Show Grounds			14	00		
" Working Expenses			107	90		
					691	90
Balance in hand					148	10

Toronto Gore.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			3	13		
" 118 Members' Subscriptions			202	00		
" Admissions to Show			32	75		
" Legislative Grant.....			140	00		
" Municipal Grant.....			15	00		
					392	88
CR.						
By Prizes for Live Stock.....	155	00				
" " Field Products.	22	50				
" " Dairy	17	00				
" " Horticultural Products.....	13	50				
" " Agricultural Implements.....	20	50				
" " Arts and Manufactures.....	22	00				
			250	50		
" Preparing Show Grounds.....			79	05		
" Paid Loan.....			47	10		
" Working Expenses.....			26	10		
					402	75
Balance due Treasurer.....					9	87

PERTH, NORTH.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		369 30	
" 302 Members' Subscriptions		309 50	
" Admissions to Show		316 99	
" Legislative Grant		700 00	
" Municipal Grants.....		135 00	
" Proceeds Sale of Seeds		122 44	
" Paid on account of Land		200 00	
" Donations		79 75	
		<u>2232 98</u>	
CR.			
By Prizes for Live Stock.....	344 00		
" " Field Products.....	168 50		
" " Dairy "	16 00		
" " Horticultural Products.....	35 50		
" " Agricultural Implements.....	70 00		
" " Arts and Manufactures.....	53 50		
" " Ploughing Match	60 00		
	<u>747 50</u>		
" Prizes of previous year.....		7 00	
" L. G. to Township Societies		449 90	
" Preparing Show Grounds.....		400 00	
" Working Expenses.....		346 12	
		<u>1950 52</u>	
Balance in hand.....			282 46

Elma.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		65 00	
" 112 Members' Subscriptions.....		113 00	
" Admissions to Show.....		13 40	
" Legislative Grant		114 10	
" Municipal "		20 00	
" J. Redford, Esq., M. P., Donation.....		20 00	
		<u>345 50</u>	
CR.			
By Prizes for Live Stock.....	143 75		
" " Field Products.....	22 50		
" " Dairy "	5 75		
" " Horticultural Products.....	2 75		
" " Agricultural Implements.....	12 00		
" " Arts and Manufactures.....	20 49		
	<u>207 24</u>		
" Prizes of previous year.....		4 25	
" Preparing Show Grounds		23 00	
" Working Expenses.....		59 35	
		<u>293 84</u>	
Balance in hand.....			51 66

REPORT.

*

*

*

The Society started this year with good prospects, having on hand from last year's audit the sum of \$65, the whole receipts for the year being the sum of \$345.

Our Spring Show was held on the 9th of April. We had eight entries, viz. : 3 of horses

and 5 of bulls; and prizes to the amount of \$39 were paid. The stock was an improvement on that of the preceeding year.

The Fall Show was a complete success. The day was beautiful, and people turned out in large numbers to exhibit their farm and other productions, or to witness the competition of those who did so. The only drawback was the want of sufficient space in which to exhibit the various articles. A hall, or some other building, for the use of our Show is very much needed, and we would recommend that some means be devised for the erection of a suitable building in which to hold our Shows. The whole number of entries were 676, being an increase over last year.

The stock was of a superior quality, and would compare favourably with stock in older and better sections of the country. Of grain, there were not many samples entered, but they were very good for the season. Roots also very good; dairy productions extra, especially butter. Agricultural and other implements, not many shown; all of good workmanship. Ladies' work and fancy articles a large display, but shown to disadvantage for the want of space, as before intimated. The whole amount paid out for prizes and other expenses was \$293 84, leaving still a balance on hand of \$51 66 in the funds of the Society. We have a list of 62 paid up members on the book for the present year. We would recommend the Directors in their several localities to make every exertion to procure members, and have their names returned to the Secretary before the 1st of June, in order to obtain a larger portion of the Government grant.

*

*

*

Logan.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			112	34		
" 81 Members' Subscriptions.....			84	50		
" Legislative Grant.....			82	87		
" Municipal Grant			30	00		
" Donations.....			34	00		
					343	71
CR.						
By Prizes for Live Stock	75	75				
" " Field Products.....	21	00				
" " Dairy	6	50				
" " Horticultural Products	12	25				
" " Agricultural Implements	8	00				
" " Arts and Manufactures	27	00				
" " Ploughing Match	18	00				
	168	50				
Unpaid.....	8	00				
			160	50		
" Preparing Show Grounds.....			22	63		
" Prizes of Previous year.....			6	25		
" Working Expenses.....			60	43		
					249	81
Balance in hand.....					93	90

REPORT.

The Directors met on the 6th day of August, to arrange their Prize List, and make other necessary arrangements preparatory to their Fall Show, which it was decided to have on the 28th of September, and on which day (fortunately a very fine one), the show came off, being so far as numbers and entries were concerned (especially in the Ladies' Department), very successful; the amount of money offered as Premiums, was \$254 75.; the amount actually awarded by the Judges, \$150 50. The stock, grain, roots, &c., was, on the whole, not so good as the Directors had anticipated or hoped for, yet an improvement on the previous

year was quite apparent both in numbers and quality, with the single exception of working horses, while the show of domestic manufactures and of Ladies' work, was an exceedingly good one. * * * *

The Directors avail themselves of this opportunity to record their thanks to Messrs. Redford and Monteith, for their liberal donations of \$20 and \$14, respectively. To Messrs. Thompson and Williams, for the Plough given by them, and also to the Township Council for their grant of \$30, as well as for the use of the Hall and grounds; and in connection with the latter, they may incidentally remark that the building of pens &c., together with other necessary outlay, not likely to occur annually, has appreciably swelled the expenses of the past year.

Before bringing this report to a close, the Directors would remark that although they are unable to congratulate the members upon either the quality or abundance of the crops of the last season, so far as this Township is concerned, yet they are glad to see unmistakable signs of progress and improvement—they would be glad to see more energetic efforts made to obtain improved breeds of stock, especially would they desire to see a better class of cows for dairy purposes; and they would recommend that an attempt to start a Cheese Factory be at once made—the land of the Township being exceedingly well adapted to pasturage. The Directors would again recommend the subject of drainage, to the consideration of the members and the inhabitants of the Township generally, feeling assured that any outlay made for this purpose, will be amply repaid by increased returns from the land.

Wallace and Elma.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		91 34	
“ 136 Members' subscriptions.....		180 00	
“ Admissions to Show.....		39 50	
“ Legislative Grant.....		160 00	
“ Municipal Grant.....		70 00	
		<hr/>	540 84
CR.			
By Prizes for Live Stock.....	170 00		
“ “ Field Products.....	22 00		
“ “ Dairy.....	5 25		
“ “ Horticultural Products.....	18 25		
“ “ Agricultural Implements.....	16 50		
“ “ Arts and Manufactures.....	15 12		
“ “ Ploughing Match.....	34 00		
	<hr/>	281 12	
Unpaid.....	67 25		
	<hr/>	213 87	
“ Preparing Show Grounds.....		114 00	
“ Prizes of Previous year.....		5 88	
“ Working Expenses.....		73 83	
		<hr/>	407 58
Balance in hand.....			133 26

Mornington.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		11 29	
“ Members' Subscription.....		88 00	
“ Admissions to Show.....		18 15	
“ Legislative Grant.....		81 32	
“ Municipal Grant.....		11 61	
“ J. Redford, Esq., M. P., Donation.....		20 00	
		<hr/>	230 37

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock	102	75				
" " Field Products	26	50				
" " Dairy	14	00				
" " Horticultural Products	3	75				
" " Agricultural Implements	3	00				
" " Arts and Manufactures	26	50				
			176	25		
" Preparing Show Ground			27	00		
" Working Expenses.....			24	07		
					227	32
Balance in hand.....					3	05

REPORT.

In presenting the Annual Report for your consideration, we take pride in noting the steady progress our Society is making from year to year; and as this section increases in wealth and cultivation, and the benefits of Agricultural Societies to the community become more fully appreciated and understood, we doubt not but the Society will increase in usefulness in the same ratio as it has hitherto done. * * * *

The Annual Fall Show was held on the 29th of September, and although the weather was very unfavourable, raining from early morning until night, the entries were somewhat over seventy in excess of last year, and had the weather been favorable, would undoubtedly have been double. The show of spring colts and two year olds was particularly good; while the yearlings and three year olds were not far behind. Of brood mares too, there was a very good show, and some of these were really superior animals. In other live stock, although the number was not in excess of last year, we think the quality was better. Of grain, the show was not large, and the samples (with the exception of fall wheat which was really superior) were scarcely so good as last year. Roots and vegetables were shown in great profusion, and were mostly superior. We were gratified to note that there was a considerable effort made to ornament the Hall with flowers, pictures, &c., the display of which was very creditable, and added not a little to the general effect.

In our last Report we expressed the hope, that ere another year had passed we would have a commodious Agricultural Hall for the use of the Association; and we are pleased to announce officially that that hope has been realized; and the Elma and Wallace Agricultural Society can now boast of as large and as substantial a Hall as any similar Society in the Province.

We take great pleasure in noting that D. D. Hay, Esq., of Listowel, last spring started a small private cheese factory, and has found the venture so remunerative that he intends to increase the capacity of his factory next season. And we are also pleased to learn that several similar establishments, and one at least much larger, are projected in Elma, and can only hope they may all be equally satisfactory.

Although the crops during the past season have been a partial failure in this section, we are rejoiced to know that there is enough for bread and seed, and a small balance for market.

We think farmers generally, would do well to breed only from improved stock in hogs, such as Berkshire, Essex, and Suffolk spring pigs, which sell to advantage in the fall.

It is gratifying to note the change for the better in the condition of the farming community of this section within the past few years. Then cash could only be procured for the staple crops; now cash and a good price can be realized for anything the farmer has to sell.

We cannot close this Report without making allusion to the great increase in the manufacturing interests of Listowel during the past year; and more especially to the erection of the extensive Flax Mill, of Messrs. J. & J. Livingstone. This factory is a great and lasting benefit to the farming community, as well as to the village; and we can only trust it will be remunerative to its energetic proprietors.

PERTH SOUTH.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		230 24	
“ 259 Members' Subscriptions.....		259 00	
“ Admissions to Show		205 71	
“ Legislative Grant.....		700 00	
“ Municipal Grant.....		160 00	
“ Miscellaneous Receipts.....		10 00	
		<u>1564 95</u>	
CR.			
By Prizes for Live Stock	306 00		
“ “ Field Products.....	51 00		
“ “ Dairy “	19 75		
“ “ Horticultural Products	22 95		
“ “ Agricultural Implements	58 00		
“ “ Arts and Manufactures	71 50		
	<u>529 25</u>		
“ “ Unpaid.....	48 08	481 17	
“ Prizes of previous year.....		98 20	
“ L. G. to Township Societies.....		302 50	
“ Preparing Show Grounds		106 05	
“ Working Expenses.....		197 23	
		<u>1185 15</u>	
Balance in hand.....			379 80

REPORT.

Your Directors have to congratulate the members on the steady increase in numbers since the formation of this Society. For the year 1870 the increase over 1869 was 29 members; yet it is a matter of some little regret that, notwithstanding the increase in membership, there was a falling off in the receipts from non-members, of \$69. This decrease was owing, partly, to a reduction in the price of admission to the exhibition, and partly to the inconvenience of holding the show in two places at the same time.

Your Directors have caused shade trees to be planted around the grounds, and have had them properly protected, and have also caused a well to be dug and pump supplied, so that a sufficient supply of water can be had at all times on the ground.

Your Directors are of the opinion that suitable buildings should be provided on the lands of the Society to accommodate all exhibitors at the Fall show, and believe that a large increase in the funds would result from having the whole exhibition held on the grounds, and your Directors would recommend that you should empower their successors to erect suitable buildings for exhibition purposes upon your lands.

Blanshard

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		14 98	
“ Members' Subscriptions.....		120 00	
“ Admissions to Show		18 51	
“ Municipal Grant.....		20 00	
		<u>173 49</u>	
CR.			
By Prizes for Live Stock.....	108 75		
“ “ Field Products.....	19 75		
“ “ Dairy “	7 50		
“ “ Horticultural Products.....	9 25		
“ “ Agricultural Implements.....	17 50		

	\$	cts.	\$	bts.	\$	?ts.
By Prizes for Arts and Manufactures	19	50				
“ “ Growing Crops.....	9	00				
			191	25		
“ “ of previous year.....			30	00		
“ Working Expenses.....			29	61		
					59	61
Balance in hand.....					113	88

NOTE:—The prizes for 1870 had not been paid when this report was made up, in consequence of a misunderstanding with the County Society respecting the Legislative Grant. This difficulty has subsequently been surmounted.

Fullarton.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			72	29		
“ 96 Members’ Subscriptions... ..			96	50		
“ Legislative Grant.....			116	00		
“ Municipal Grant.....			20	00		
					304	79
CR.						
By Prizes for Live Stock.....	103	25				
“ “ Field Products.....	22	00				
“ “ Dairy “	7	50				
“ “ Horticultural Products.....	5	75				
“ “ Agricultural Implements.....	7	75				
“ “ Arts and Manufactures.....	16	00				
			162	25		
“ Preparing Show Grounds.....			6	27		
“ Working Expenses.....			61	75		
					230	27
Balance in hand.. ..					74	52

NOTE:—The Society held a Spring and a Fall Show, both of which appear to have been successful, and the Society is in a good condition.

Hibbert.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			65	90		
“ 83 Members’ Subscriptions.....			93	75		
“ Admissions to Show			22	60		
“ Legislative Grant.....			126	50		
“ Municipal Grant.....			35	00		
“ Miscellaneous Receipts.....			50	00		
					393	75
CR.						
By Prizes for Live Stock.	127	25				
“ “ Field Products	20	80				
“ “ Dairy	7	50				
“ “ Horticultural Products.....	14	75				
“ “ Agricultural Implements.....	9	75				
“ “ Arts and Manufactures	31	75				
“ “ Ploughing Match.....	57	00				
			268	80		

	\$	cts.	\$	cts.	3	cts.
Unpaid...	12	10				
By Working Expenses.....			256	70		
			52	29		
					308	99
Balance in hand.....					84	76

PETERBORO' EAST.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			152	79		
" 76 Members' Subscription			76	00		
" Admissions to Show.....			139	50		
" Legislative Grant.....			700	00		
" Proceeds of Sale of Seeds.....			48	74		
" Cash from Asphodel, Belmont and Dunmer Township Society.....			103	75		
" Donations to Ploughing Match			142	00		
					1362	78
CR.						
By Prizes for Live Stock.....	228	12				
" " Field Products.....	61	25				
" " Dairy.....	14	50				
" " Horticultural Products.....	18	63				
" " Agricultural Implements.....	22	00				
" " Arts and Manufactures.....	62	00				
" " Ploughing Match.....	132	00				
	538	50				
Unpaid.....	20	00				
			518	50		
" L. G. to Township Societies			407	86		
" Preparing Show Grounds			6	45		
" Purchase of Seed			66	00		
" Prizes of previous year.			11	00		
" Working Expenses.....			189	52		
					1199	33
Balance in hand.....					163	45

REPORT.

* * * *

Your Directors congratulate you, not only upon the steady progress made by the Society, but also upon its prospects for the future. The deep interest manifested in its proceedings by our farmers generally throughout the Riding, indicates that an impetus is being given in the right direction, and affords evidence that the benefits arising from institutions of the kind are becoming more generally understood and appreciated. The practical results are already to a considerable extent apparent in improved culture, improved stock, enlarged area of root crop cultivation, and the steadily increasing importation of labour saving machines.

In accordance with your instructions at the last Annual Meeting, your Directors, early last spring, procured from Mr. Weld's Emporium, London, a quantity of new varieties of seed grains for distribution amongst the members.

The varieties selected were, Norway and Surprise Oats, Crown Peas, and Chevalier Barley. Whether from their extreme cost or other causes, the members of the Society throughout the Riding did not so generally avail themselves of the opportunity to procure a share of

these seeds as the Directors had anticipated, some of each of the varieties still remaining on hand.

The report from those members who have fairly tested them are, on the whole, unfavourable. The Crown Peas are reported "wormy," light in the straw—not free from mildew, quality and product not superior to other varieties in cultivation. Chevalier Barley on the whole received with disfavour—being a two rowed variety not more productive, and said to be inferior in malting qualities. The Norway Oats are reported to be an acquisition, the productiveness claimed for them being in most instances fully borne out.

Your Directors would recommend that the Crown Peas and Norway Oats be further tested during the coming season.

In February last a communication was received from the Secretary of the West Riding Society, soliciting the joint co-operation of this Society with that of the West Riding, to hold an Exhibition of horses in the spring. Your Directors met, and agreed to the proposition, appointed a Committee to act conjointly with a Committee from the West Riding, and instructed them to draw on the Treasurer to the extent of \$30 or an equivalent amount to that contributed by the West Riding, to be awarded in premiums. This arrangement was carried out and the Exhibition by consent was held in Peterboro'. The Committee, however, stipulated that the horses to which the premiums might be awarded should stand during the season in Peterboro', Keene and Norwood. The Prize horses did not travel within the County, therefore this Society has not been called on for any share of the premiums awarded.

In accordance with the order adopted at the organization of this Society (the necessary notice having been received that all accommodation would be provided,) your Directors met at Warsaw in June, to make arrangements for holding the Annual Fall Show at that place. Before any action was taken the Secretary of the Dummer and Douro Society handed in the following resolution: "That the Dummer and Douro Agricultural Society consider that they cannot amalgamate with the East Riding Agricultural Society this year, and that the County Society be notified to that effect." In consequence of this decision your Directors met during the same month at Westwood, and agreed to hold the Exhibition on the 10th and 11th days of October, at Norwood, provided the necessary guarantee of accommodation and amalgamation of funds be given by the Asphodel, Belmont & Dummer Agricultural Society, which was at once obtained.

Your Directors are pleased to congratulate you on the entire success of the Exhibition. The weather was favourable, the concourse of people equal to that of any former Exhibition, and the display of horses, cattle, sheep, agricultural products, manufactures, &c., very extensive, and highly creditable to the East Riding. The number of entries of the season was 716, being an increase of 212 entries over the Show of the previous year, and 142 over that of the Society's first Exhibition.

The steady improvement which has marked all our productions evinced by these Annual Exhibitions, is a source of much congratulation, and your Directors do not hesitate to assert that no section of country in this highly favoured Province exhibits a more rapid and durable improvement than the East Riding of Peterborough.

The Society's Ploughing Match, open to all ploughmen in the East Riding, took place on the farm of Gavin Shearer, Esq., Otonabee, on the 19th October last. The competition numbered 26. The value of the premiums offered in cash, ploughs, cultivators and other useful articles, amounted to the handsome sum of \$143. Of this amount only about \$7 was required from the Society's Funds, the rest being donations received by the Committee. Of these your Directors have pleasure in making special mention of a Steel Mould Board Plough presented by P. Hamilton, Esq., Peterboro', value \$16—a plough value \$10 presented by Wm. Helm, Esq., Peterboro', and a Combined Cultivator and Drag, value \$10, presented by Messrs. Brownlee and Lauder, Hastings. The commendable spirit of rivalry induced by these matches, more especially among the youth of our Riding, cannot fail to result in the superior cultivation of our soil.

Your Directors would recommend that encouragement be given to the manufacture of cheese. From the reported satisfactory results which have attended these establishments in other sections of the country, your Directors believe that the introduction here would materially promote the wealth and welfare of the Riding. Several of our Townships are well fitted for trying the experiment, and the development of this important branch of in-

dustry would necessarily involve less cropping, the devoting more of our fields to pasturage, roots and grain raising, and as a consequence, the ability to keep larger, and a tendency to improve our stock of animals, with a proportionate increase of manuring material, the want of which in our present system of cultivation must be apparent to all.

* * * *

Asphodel, Belmont and Dummer

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		57 85	
" 234 Members' Subscriptions.....		234 00	
" Legislative Grant.....		140 00	
" Proceeds Sale of Seeds.....		326 00	
		757 85	
CR.			
By Paid to County Society.....	103 75		
" Purchase of Seeds.....	491 68		
" Agricultural Publications.....	43 75		
" Working Expenses.....	60 82		
		700 00	
			57 85

NOTE.—The Society united with the County Society for a Fall Show, which was very successful.

Dummer and Douro.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		71 54	
" 126 Members' Subscriptions.....		126 00	
" Legislative Grant.....		81 92	
" Municipal ".....		25 00	
" Proceeds Sale of Seeds.....		180 05	
" Donations for Agricultural Hall.....		82 63	
" Miscellaneous Receipts.....		4 35	
		571 49	
CR.			
By Prize of previous year.....	1 25		
" Purchase of Seeds.....	342 64		
" Paid on Exhibition Building, Fencing, &c..	182 00		
" Working Expenses.....	21 27		
		547 16	
			24 33

Balance in hand

REPORT.

Your Directors report that the great inconvenience felt by this Society for want of a proper building in which to hold the Annual Exhibitions, claimed their most serious consideration. Your Directors resolved to hold no Exhibition this season, but apply all the available funds of the Society to aid in the erection of an Agricultural Hall in the village of Warsaw, as they considered it conducive to the convenience and advancement of Agriculture in this locality.

Your Directors feel that the farmers are beginning to take an increased interest in these Annual Exhibitions and Ploughing Matches, which indicates an approval of the mode of disposing of so much of the Society's Funds, and which, no doubt, must tend to encourage agricultural industry in all its branches. Your Directors congratulate you upon the energy and enterprise of our farmers.

Dummer possesses an Agricultural Hall, with the prospect of the County Exhibition being held in it in 1871.

Finally, your Directors congratulate you on the successful incorporation of your Society.

Dysart.

DR.	\$ cts.	\$ cts.	\$ cts.
To 55 Members's Subscriptions.....		79 00	
" Admissions to Show		1 00	
" Legislative Grant.....		50 45	
" Proceeds Sale of Live Stock.....		34 50	
			164 95
CR.			
By Prizes for Live Stock	56 50		
" " Field Products.....	24 75		
" " Dairy "	2 25		
" " Horticultural Products.....	2 05		
" " Agricultural Implements.....	1 75		
" " Arts and Manufactures	6 75		
		94 05	
" Purchase of Live Stock.....		40 00	
" Working Expenses.....		25 93	
			159 98
Balance in hand			4 97

NOTE.—Crops of the Township were a fair average, and no midge. Live Stock improving in quality, and much increasing in number.

Minden, Snowden and Stanhope.

DR.	\$ cts.	\$ cts.	\$ cts.
To Members' Subscriptions.....		65 00	
" Legislative Grant.....		32 50	
			97 50
CR.			
By Prizes for Live Stock.....	35 20		
" " Field Products.....	15 25		
" " Arts and Manufactures.....	19 55		
		70 00	
" Working Expenses.....		12 46	
			82 46
Balance in hand.....			15 04

Otonabee.

DR.	\$ cts.	\$ cts.	\$ cts.
To 158 Members' Subscriptions.....		158 00	
" Admissions to Show.....		63 60	
" Legislative Grant		102 73	
" Proceeds Sale of Seeds and Plaster.....		517 26	
" Borrowed.....		400 00	
" Miscellaneous Receipts.....		13 70	
			1255 29
CR.			
By Balance due Treasurer.....		52 06	
" Prizes for Live Stock.....	68 00		
" " Field Products.....	25 75		
" " Dairy "	8 25		

	\$	cts.	\$	cts.	\$	cts.
By Prizes for Horticultural Products	3	37				
" " Agricultural Implements.....	1	00				
" " Arts and Manufactures.....	16	25				
	122	62				
Unpaid.....	81	75				
			40	87		
" Paid Borrowed Money.....			196	42		
" Preparing Show Grounds.....			13	54		
" Purchase of Seed and Plants.....			791	33		
" Working Expenses.....			57	07		
					1151	29
Balance in hand... ..					104	00

PETERBORO' WEST.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			9	51		
" 69 Members' Subscription.....			135	50		
" Admissions to Show.....			119	70		
" Legislative Grant.....			700	00		
" Miscellaneous Receipts			8	50		
					973	21
CR.						
By Prizes for Live Stock.....	259	75				
" " Field Products.....	29	00				
" Dairy	20	50				
" Horticultural Products....	12	75				
" Agricultural Implements..	19	00				
" Arts and Manufactures.....	56	50				
" Ploughing Match.....	50	00				
	447	50				
Unpaid.....	34	00				
			413	50		
" Prizes of previous year			14	50		
" L. G. to Township Societies.....			280	00		
" Preparing Show Grounds			20	25		
" Working Expenses.....			87	35		
					815	60
Balance in hand.....					157	61

Monaghan, South.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			52	50		
" 63 Members' Subscription.....			63	00		
" Admissions to Show.....			24	50		
" Legislative Grant.....			140	00		
					280	00
CR.						
By Prizes for Live Stock	111	75				
" " Field Products	27	50				
" " Dairy	8	50				

	\$	cts.	\$	cts.	\$	cts.
By Prizes for Horticultural Products, ..	36	50				
" " Arts and Manufactures.....	18	50				
" " Ploughing Match.....	17	00				
				219	75	
" Prize of previous year				1	00	
" Working Expenses.....				34	19	
						254 94
Balance in hand.....						25 06

REPORT.

In presenting the Annual Report for the year just closed, we congratulate the members generally, on the prosperity of another year. Although the hay and cereal crops in general were rather short, owing to the drouth in the early part of summer, the deficiency has not been much felt, as farm produce has sold at fair prices and live stock of all kinds have been in good demand, and prices for good animals have been high.

We regret to have to report a considerable decrease in membership. We believe that farmers and mechanics generally, will find it to their interest to unite with the Society, as they are thereby brought in immediate contact with others engaged in like pursuits, and a wholesome rivalry is the result for who shall be the leader in the various branches represented, and that are encouraged by the Society.

We would also recommend to all who desire to succeed, a selection of good periodicals, as one of the best helps, of which there are several published in the Province of Ontario.

As a nation's prosperity and greatness very much depend upon the working classes, composed largely of the husbandman and the mechanic, we would strongly urge the necessity of providing a more liberal system of education in these branches, viz., the Agricultural and Mechanical Arts.

The Annual Show of the Society was held at Bailieboro', on the 14th day of October.—In most of the departments the former reputation was sustained. Horses, not largely exhibited, although some fine animals were on exhibition, there is yet room for improvement. In cattle there is a wide margin for improvement; there being only two thoroughbred animals exhibited in this class, and both of them Devons. Sheep, largely exhibited and of good quality; also a number of good pigs. In poultry, there is not a very great interest taken. Of grain, there was a good show; of wheat the kinds generally grown are Soules and Red for fall, Club and Fife or Goldendrop for spring; peas, barley and oats, light crops, and the grain not as good as last year. The root crop is a good one; the show of potatoes, turnips, carrots, mangels, &c., was superior this year. The fruit crops generally short, of which there was a limited show. Dairy produce was not sufficiently represented, especially cheese, a branch that does not receive that attention the importance of the subject demands. It is with pleasure we notice the efforts that are being made to establish a cheese factory at or near Centreville.

Smith, Ennismore and North Monaghan.

DR.	\$	cts.	\$	cts.	\$	cts.
To Members' Subscriptions.....		63	00			
" Legislative Grant.....		140	00			
" Proceeds of sale of Seeds.		203	33			
" Miscellaneous Receipts.....		6	31			
					412	64
CR.						
By Balance due Treasurer			84	16		
" Prizes for Live Stock.....	117	00				
" " Field Products.....	20	00				
" " Dairy.....	15	00				
" " Horticultural Products.....	13	25				
" " Arts and Manufactures.....	6	50				
				170	75	

	\$ cts.	\$ cts.	\$ cts.
By Working Expenses.....		21 13	
		<u> </u>	277 04
Balance in hand.....			135 60

PRESCOTT.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		21 28	
“ 61 Members’ Subscriptions.....		64 00	
“ Admissions to Show.....		39 38	
“ Legislative Grant.....		700 00	
“ Deposit of E. and W. Hawkesbury Society		80 00	
“ Miscellaneous Receipts.....		13 37	
		<u> </u>	918 03
Cr.			
By Prizes for Live Stock.....	181 00		
“ “ Field Products.....	34 00		
“ “ Dairy.....	45 00		
“ “ Agricultural Implements.....	8 00		
“ “ Arts and Manufactures.....	61 75		
		<u> </u>	329 75
“ L. G. to Township Societies.....		420 00	
“ Preparing Show Grounds.....		9 79	
“ Deposit of E. and W. Hawkesbury Society		80 00	
“ Working Expenses.....		61 06	
		<u> </u>	900 60
Balance in hand.....			17 43

REPORT.

The Directors in submitting their Annual Report, and taking a retrospective view of the workings of the Society for the past year, have great reason to feel thankful for their success.

That the season was one of very rare character, being from early seed time until almost harvest excessively dry and unfavourable to the growth of vegetation, no one will deny. Yet, notwithstanding the unfavourableness of the spring and summer months, and the amount of discontent evinced by husbandmen in general, as portrayed in their occasional grumble about the weather, the Annual Exhibition was quite a success, on no former occasion was such a display made.

*

*

*

The stock of horses and cattle on exhibiton manifested quite a marked improvement over former years. The samples of dairy products shown were both excellent and numerous. The display of etoffes and flannels—all home manufacture—would be hard to beat. And last, though not least, the Ladies’ department of coverlets, counterpanes, mitts, socks, stockings, fancy work, &c., &c., was quite bewildering and delightful—showing at least to those capable of appreciating their talents, that the competitors in that line of manufacture had vied with each other in producing at once the most lovely, perfect, useful, durable and delightful comforts that could be desired.

The Directors, in drawing their Annual Report to a close, may mention the fact that they are deeply indebted to the Officers of the 18th Battalion, Volunteer Militia, for their kindness in allowing them the use of their Drill Shed for the purpose of holding their Annual Exhibition; and may state that an offer of two acres of land to the Society for Exhibition ground has been made by the Treasurer of the Society, James Boyd, Esq., M. P. P., gratis, accompanied with a liberal donation in money, should the Society feel disposed to procure and erect suitable buildings for its own accommodation; such an act on its part we would highly recommend.

*

*

*

*

Caledonia.

DR.	\$ cts.	\$ cts.	\$ cts.
To 19 Members's Subscriptions.....		38 00	
" Legislative Grant.....		55 22	
		<u> </u>	93 22
CR.			
By Prizes for Growing Crops		78 00	
" Working Expenses.....		12 00	
		<u> </u>	90 00
Balance in hand.....			<u> </u> 3 22

Longueil and E. and W. Hawkesbury.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		11 00	
" 39 Members' Subscriptions.....		99 00	
" Legislative Grant.....		143 88	
		<u> </u>	253 88
CR.			
By Prizes Growing Crops.....		190 00	
" Working Expenses.....		58 00	
		<u> </u>	248 25
Balance in hand.....			<u> </u> 5 63

Plantagenet, North.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		2 91	
" 25 Members' Subscriptions.....		52 00	
" Legislative Grant.....		75 57	
		<u> </u>	130 48
CR.			
By Prizes for Live Stock.....	37 82		
" " Field Products.....	11 11		
" " Dairy.....	5 37		
" " Horticultural Products.....	2 00		
" " Arts and Manufactures.....	9 74		
" " Growing crops.....	37 28		
	<u> </u>	103 32	
" Working Expenses.....		27 00	
		<u> </u>	130 32
Balance in hand.....			<u> </u> 0 16

Plantagenet, South.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		2 70	
" 50 Members' Subscriptions.....		100 00	
" Legislative Grant.....		145 33	
		<u> </u>	248 03
CR.			
By Prizes for Live Stock	142 55		
" " Field Products....	39 34		
" " Dairy.....	9 40		
" " Arts and Manufactures.....	12 55		
	<u> </u>	203 84	
" Subscription to County Society.....		10 00	

	\$	cts.	\$	cts.	\$	cts.
By Working Expenses.....			15	00		
					228	84
Balance in hand					19	19

PRINCE EDWARD.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			41	39		
" 198 Members' Subscriptions.....			198	00		
" Admissions to Show.....			543	45		
" Legislative Grant.....			700	00		
					1482	84
CR.						
By Prizes for Live Stock.....	380	75				
" " Field Products.....	33	50				
" " Dairy.....	19	25				
" " Horticultural Products.....	16	00				
" " Agricultural Implements.....	14	75				
" " Arts and Manufactures.....	81	76				
" " Ploughing Match.....	26	00				
	572	01				
Unpaid.....	82	26				
			489	75		
" Prizes for previous year.....			78	20		
" L. G. to Township Societies.....			419	81		
" Preparing Show Grounds.....			39	50		
" Purchase of Exhibition Ground.....			128	64		
" Digging Well.....			18	00		
" Working Expenses.....			245	25		
					1419	15
Balance in hand.....					63	69

REPORT.

Your Directors are happy to observe a gradual and steady improvement in Stock of every kind in the County. Some fine specimens of short horned cattle were exhibited; one specimen was purchased from Mr. Cochrane's herd, Quebec: the Durhams appear to be the favourite stock in the County.

Horses, sheep and swine, were all of good quality, particularly the former.

Some fine specimens of poultry were exhibited; a number of ducks and dunghill fowls from imported eggs.

The severe drought affected the crops of grain and roots in the County; but, notwithstanding, there was a very good display of both, as well as a good show of vegetables.

The specimens of fruit, as usual, were of an excellent quality, and the orchard is becoming one of the staples of the County, and a large revenue is derived from the sale and exportation of apples.

Your Directors would beg leave to call your attention to the subject of providing a residence for a care taker of the building and grounds, as the property is of too much value to be left in the manner it now is.

Ameliasburgh.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand ;.....			42	17		
" 90 Members' Subscriptions.....			90	00		
" Admissions to Show.....			34	25		
" Legislative Grant.....			68	00		
					234	42

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock.....	95	10				
“ “ Field Products.....	16	00				
“ “ Dairy “.....	3	00				
“ “ Horticultural Products.....	8	80				
“ “ Agricultural Implements.....	11	50				
“ “ Arts and Manufactures.....	15	70				
			150	10		
“ Preparing Show Grounds.....			17	12		
“ Working Expenses.....			24	60		
					192	82
Balance in hand.....					42	60

Hallowell.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			135	71		
“ 192 Members' Subscriptions.....			192	00		
“ Admissions to Show.....			16	90		
“ Legislative Grant.....			116	37		
“ Proceeds Sale of Plaster.....			303	50		
					764	48
CR.						
By Prizes for Live Stock.....	88	05				
“ “ Field Products.....	17	75				
“ “ Dairy “.....	13	50				
“ “ Horticultural Products.....	19	62				
“ “ Agricultural Implements.....	3	25				
“ “ Arts and Manufactures.....	56	98				
“ “ Ploughing Match.....	9	00				
			208	15		
Unpaid.. ..						
“ Purchase of Plaster.....			470	00		
“ Working Expenses.....			51	15		
					521	15
Balance in hand.....					243	33

NOTE.—A part of the premiums have been paid, but not in time for this Report. The total amount \$2 8 15 when fully paid, will leave a balance in Treasurer's hands of \$35 18.

Hillier and Hallowell.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			46	18		
“ 122 Members' Subscriptions.....			123	00		
“ Admissions to Show.....			21	05		
“ Legislative Grant.....			76	71		
“ Miscellaneous Receipts.....			6	80		
					273	74
CR.						
By Prizes for Live Stock.....	138	75				
“ “ Field Products.....	16	75				
“ “ Dairy “.....	16	30				
“ “ Horticultural Products.....	8	05				
“ “ Agricultural Implements, &c.....	17	25				
“ “ Arts and Manufactures.....	21	55				
					218	65

	\$	cts.	\$	cts.	\$	cts.
By Working Expenses.....			59	18		
					277	83
Balance due Treasurer					4	09

Sophiasburgh,

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			6	82		
“ 59 Members' Subscriptions.....			67	00		
“ Legislative Grant.....			39	50		
					113	32

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock.....	56	25				
“ “ Field Products.....	10	65				
“ “ Dairy.....	3	00				
“ “ Horticultural Products.....	4	75				
“ “ Arts and Manufactures.....	21	80				
	96	45				
Unpaid	16	20				
			80	25		
“ Working Expenses.....			14	75		
					95	00
Balance in hand.....					18	32

Pictou Horticultural Society.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand,			134	00		
“ 204 Members' Subscriptions.....			205	00		
“ Admissions to Show.....			230	63		
“ Legislative Grant.....			128	73		
					698	36

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Fruits.....	52	00				
“ “ Plants and Flowers.....	122	50				
“ “ Vegetables.....	32	25				
			206	75		
“ “ Dairy Products.....			27	50		
“ “ Fine Arts and Ladies' Work.....			69	25		
“ “ Poultry.....			35	00		
“ “ Miscellaneous.....			27	25		
			365	75		
“ Working Expenses.....			186	76		
					552	51
Balance in hand.....					145	85

REPORT.

The Directors at the end of the second year of the Society's existence are gratified with the continued success it has met with; the number of members having nearly doubled that of the first year, being now 204, while last year it was only 120. Its Finances are still in a healthy condition, having a balance on hand of \$145.85, with all claims against the Society paid. The amount offered for premiums the past year was considerably in excess of the previous one, \$365.75 was paid in prizes this year, while only \$201.50 the first year.

The exhibitions, (notwithstanding the very unfavourable season,) were almost equal to those of last year. We notice that in several places, such as Kingston, Montreal and others, which have Societies of larger pretensions than ours, were obliged to forego their summer exhibitions in consequence of the season.

The exhibition in July was a complete success, as far as the number of admission tickets sold, realizing from this source the handsome sum of \$159.93, which at 10 cents each for non members would show that nearly 2,000 people visited the exhibition.

The show of plants and flowers was, perhaps, not quite so fine as last year, but on the whole, was a credit to the exhibitors. A good show of small fruits, vegetables, fine arts, ladies' work, minerals, curiosities, dairy products, poultry, &c., &c.

The Fall Show in September was not quite so well attended, but was beyond our anticipations. The sum realized for admission of non-members was \$70.70, which would make with members, the number of visitors nearly 1,000.

The plants and flowers at this exhibition were quite equal to the last year, and in cut flowers superior, we noticed several beautiful new varieties of plants belonging to Mrs. Yarwood, which had never been exhibited before. The show of vegetables could not be surpassed. Fine arts, ladies' work, minerals, curiosities, dairy products, &c., were all up to the mark.

In the poultry class we were pleased to notice a decided improvement in the stock exhibited, and the Directors would recommend a continuation of extra prizes for each year's imported stock, or raised from imported eggs. As poultry and their products now form a large item of export and for consumption in the County, every encouragement should be given to increase the stock of improved breeds.

The display of fruit at the Fall Exhibition was the best that has ever been seen, at any of our County Exhibitions. The collections exhibited by our professional fruit growers, Messrs. Dempsey, Williams and Werden, would compare favourably with, if not surpass, any we have seen at the Provincial or other exhibitions in Canada. Mr. Dempsey exhibited 44 varieties of apples, 34 varieties of pears, 30 varieties of grapes. — peaches, plums, &c., and also a seedling pear grown by him. The Directors appointed a committee to examine it, and reported on its merits as being a large Russet Pear, fine musky flavour, rich and juicy, and pronounced it one of the best, naming it the "Loomis Pear," awarded it a special prize and diploma.

Mr. Williams' collection of apples and pears were equal to Mr. Dempsey's, but not his grapes. Not having a list of his collection, we are unable to report the number of varieties. The amateur collection was excellent, and in many cases carried the prizes from the professionals in the sections where both were competitors.

The following are the kind of apples which were awarded prizes :—

Winter Dessert—1st, Fameuse; 2nd, Ripson Pippin.

Fall Dessert—1st, Pippin; 2nd, Hawley.

Winter Cooking—1st, Holland Pippin; 2nd Northern Spy.

Fall Cooking—1st, “ “ 2nd “ “

Best Seedling Winter Apple—1st, Sager Greening, grown by P. C. Dempsey.

2nd, " " " ———, grown by J. P. Williams.

Best Seedling Fall Apple—1st, J. P. Williams.

The export of apples from the port of Picton, this year, was about 10,000 barrels, and valued at a low estimate, \$14,000, besides about 800 bushels of apples, dried, value \$4,000, in all forming a revenue from this source of over \$18,000 for the year 1870, shipped from the Port of Picton alone. Owing to the premature ripening of this fruit this year and obtaining a second growth, as it were, we regret to hear of reports that apples are decaying very early, which, we suppose, has been the case in other parts of the country as well as here.

The Directors would not like to conclude their Report on Fruit, without calling attention to the destructiveness of the apple worm or borer; they believe fully one third of the apples grown are lost by this enemy, and they would respectfully suggest the propriety of offering a prize for the best discovery for ridding us of this pest. Should other Societies offer a similar prize, perhaps it would be the means of stirring up some one who would discover a remedy.

The Directors are glad to notice that prizes are offered (at the suggestion of this Society) by the Town Council, for the planting of shade and ornamental trees in the town.

They cannot close their Report without tendering to the Town Council their thanks for the free use of the Market Hall for their Exhibition, and for every facility offered for the furtherance of the interest of the Society, and they would wish to embody in this Report, their high appreciation of Mr. McCaun's lecture, and also of the valuable address by Professor Buckland, at the close of the July Exhibition.

RENFREW, NORTH.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		211 38	
" 105 Members' Subscriptions.....		135 00	
" Legislative Grant.....		700 00	
" T. Murray, Esq., M. P. P., Donation.....		50 00	
		<u>1096 38</u>	
CR.			
By Prizes for Live Stock.....	341 55		
" " Field Products.....	30 00		
" " Dairy ".....	5 50		
" " Horticultural Products.....	5 30		
" " Agricultural Implements.....	18 20		
" " Arts and Manufactures.....	26 00		
" " Growing Crops.....	40 00		
		<u>466 55</u>	
" L. G. to Township Societies.....		210 00	
" Purchase of Live Stock.....		87 00	
" Working Expenses.....		166 65	
		<u>930 20</u>	
Balance in hand.....			166 18

Grattan and Wilberforce.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		123 10	
" 54 Members' Subscriptions.....		54 00	
" Legislative Grant.....		140 00	
		<u>317 10</u>	
CR.			
By Prizes for Live Stock.....	36 00		
" " Field Products.....	19 00		
" " Dairy ".....	5 00		
" " Horticultural Products.....	2 50		
" " Agricultural Implements.....	14 00		
" " Arts and Manufactures.....	17 00		
" " Ploughing Match.....	18 00		
		<u>111 50</u>	
" Working Expenses for two years.....		121 58	
		<u>233 08</u>	
Balance in hand.....			84 02

Ross.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		150 35	
" 52 Members' Subscriptions.....		52 00	
" Legislative Grant.....		140 00	
		<u>342 35</u>	

Cr.	\$ cts.	\$ cts.	\$ cts.
By Prizes for Live Stock.....	46 25		
“ “ Field Products.....	16 70		
“ “ Dairy “.....	5 75		
“ “ Horticultural Products.....	3 15		
“ “ Agricultural Implements.....	19 25		
“ “ Arts and Manufactures.....	19 40		
“ “ Ploughing Match.....	13 00		
	<hr/>		
	123 50		
Unpaid.....	14 15		
	<hr/>		
		109 35	
“ Agricultural Publications.....		10 80	
“ Working Expenses.....		44 15	
		<hr/>	
			164 30
			<hr/>
Balance in hand.....			178 05

REPORT.

The Directors have to report that there has been little or no increase in the number of members of the Society during the past year, but there has been a marked improvement in the quality of the exhibits.

They have also to report that, in consequence of the severe drought and of the terrific fires which devastated a great part of our Township last season, your exhibition has retrograded from the position it occupied in former years.

The Directors would wish that the Society should, however gradually, be in a state of progressive improvement, so that the resources of the locality may be more and more developed, and the material interests of the members proportionately served. Such desirable results can only be attained by a combined mode of action energetically maintained on the part of all the members of the Society.

The Government grant to the Society last year was \$140, which certainly was a liberal allowance for its benefit, and the members ought to be greatly stimulated in the performance of their part in the premises.

The Directors have to report with regard to the ploughing match that there is a wide margin for improvement in this department, and they trust that a hint in this respect will be taken in good part, and acted on and proved, by having more competition at the next ploughing match.

* * *

 RENFREW, SOUTH.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		145 13	
“ 130 Members' Subscriptions.....		142 50	
“ Legislative Grant.....		700 00	
“ Proceeds Sale of Seeds and Service.....		45 37	
“ Donations.....		70 00	
		<hr/>	
			1103 00

Cr.	\$ cts.
By Prizes for Live Stock.....	162 85
“ “ Field Products.....	39 65
“ “ Dairy “.....	19 25
“ “ Horticultural Products.....	3 15
“ “ Agricultural Implements.....	32 50
“ “ Arts and Manufactures.....	30 05

CR.	\$ cts.	\$ cts.	\$ cts.
By Prizes for Growing Crops	73 25		
" " Ploughing Match.....	26 00		
	386 70		
Unpaid.....	16 40		
		370 30	
" L. G. to Township Societies.....		350 00	
" Preparing Show Grounds.....		2 00	
" Purchase of Bull.....		235 80	
" Working Expenses.....		137 90	
		1096 00	
Balance in hand.....			7 00

REPORT.

Your Directors in submitting a statement of the affairs of the Society for the past year, feel happy on being able to say that it is in a healthy and prosperous condition, the number of members being 130, which is in excess of any former period of its existence.

The premium list was considerably enlarged for the past year, and a thorough-bred Ayrshire Bull, 2 years old, purchased from N. S. Witney, Freilisburg, Province of Quebec, at a cost thereof of \$175. Freights, &c., to Sand Point added, made \$190 80. The bull was located with Mr. Henry Airth, of Horton, during the months of April and May; at Alexander Leckie's, Burnstown, during the month of June, and at John Campbell's, Admaston, from 1st July till 15th of August. The charge to members being one dollar per cow, and two dollars to non-members. The allowance for keep during the season of service being ten dollars per month; the amount realized from service during this period was thirty-five dollars, and the amount paid for keep forty-five dollars.

The bull is located with Mr. Alexander Stewart, White Lake, from 15th August last till 15th May next, at a cost of forty-five dollars for his keep.

From the experience of other Societies, your Directors are now of opinion that it would be better not to change the location of the bull oftener than twice during the season of service in one year, as frequent changes into strange hands tend to make animals cross and unmanageable.

The President, J. L. McDougall, Esq., gave a donation of thirty dollars, which was applied as prizes for grain in the bag. E. M'Gillivray, Esq., Ottawa, gave his usual contribution of ten dollars, which was applied as prizes for draught horses. Duncan M'Intyre, Esq., of Montreal, gave a donation of thirty dollars as special prizes for the best and second best herd of a bull and three females; the bull to be thorough-bred. In addition to this liberal donation, Mr. M'Intyre, in conjunction with W. Airth, of Renfrew, negotiated the transaction of purchasing the bull for the Society free of charge.

The Hon. James Skead contributed his usual gift of an iron plough, as a first prize at the Ploughing Match. The competition at the Ploughing Match was not so numerous as your Directors would wish, nor as the prizes offered would warrant, there being but six competitors in the first class, and only one in the second.

The crop entries were not so numerous as in former years, which may be accounted for in the season being so extremely dry, it being the driest season experienced in this County since the first settlement.

The Exhibition was very successful, most classes being well represented, and the quality in most cases good. The concourse of people assembled on the occasion was very large.

The reports from the Branch Societies show them to be in good working order.

*

*

*

Admaston.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		13 40	
" 40 Members' Subscriptions.....		62 00	

DR.	\$ cts.	\$ cts.	\$ cts.
To Legislative Grant.....		140 00	
" Miscellaneous Receipts.....		5 30	
		<u>220 70</u>	
CR.			
By Prizes for Live Stock.....	48 30		
" " Field Products.....	14 25		
" " Dairy ".....	6 25		
" " Horticultural Products.....	5 90		
" " Agricultural Implements.....	8 25		
" " Arts and Manufactures.....	16 97		
" " Growing Crops.....	20 25		
	<u>120 17</u>		
Unpaid..	2 08		
		<u>118 09</u>	
" Purchase of Seed.....		27 70	
" Working Expenses		26 37	
		<u>172 16</u>	
Balance in hand.....			48 54

Grattan and Wilberforce.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		123 10	
" 54 Members' Subscriptions.....		54 00	
" Legislative Grant.....		140 00	
		<u>317 10</u>	
CR.			
By Prizes for Live Stock.....	36 00		
" " Field Products.....	19 00		
" " Dairy ".....	5 00		
" " Horticultural Products.....	2 50		
" " Agricultural Implements.....	14 00		
" " Arts and Manufactures.....	17 00		
" " Ploughing Match.....	18 00		
	<u>111 50</u>		
" Working Expenses for 2 years.....		121 58	
		<u>233 08</u>	
Balance in hand.....			84 02

REPORT.

We are happy in being able to state that the prospects of this Branch Society are highly flattering, and we are pleased to find that the farmers are beginning to take a greater interest in its welfare than heretofore. However, we hope to witness still greater efforts on the part of the public, in upholding such a useful institution.

The horses, cattle, sheep, grain, butter, implements and home manufactures, exhibited on the first day of October last, reflected great credit on the members of the Society.

We are also rejoiced to find that the farmers generally are anxious to improve the breed of their stock, as well as introduce the most useful kinds of grain. This, indeed, is to be highly commended and encouraged; and in order to facilitate such laudable enterprises, we beg most respectfully to recommend to our successors in office the establishment of a depot in this village for the importation of the most approved kinds of grain and seeds, together with potatoes, and that a sufficient sum of money for that purpose be appropriated out of the funds of the Society. The mode of distribution we shall leave with the Board of Directors to

decide. In another year we hope the funds will warrant the purchase of a good bull for the use of the members.

*

*

*

McNab.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		40 84	
" 69 Members' Subscriptions.....		96 00	
" Legislative Grant.....		140 00	
		-----	276 84
Cr.			
By Prizes for Live Stock.....	84 25		
" " Field Products.....	28 00		
" " Dairy ".....	20 00		
" " Horticultural Products.....	6 00		
" " Agricultural Implements.....	12 50		
" " Arts and Manufactures.....	24 40		

	175 15		
Unpaid.....	29 45		
	-----	145 70	
" Preparing Show Grounds		2 00	
" Discount on silver.....		12 19	
" Agricultural Publications		33 75	
" Working Expenses.....		34 10	
		-----	227 74

Balance in hand.....			49 10

REPORT.

The Directors beg leave to submit their report for the year 1870, and in doing so would remind you of the goodness and forbearance of the Great Director of all things toward us as a people, when so much of Central Canada was overrun by fire last summer. Although we did not escape altogether scathless yet the area swept by fire within our borders, and the damage done and loss sustained thereby, was, we are happy to state, very small when compared with the destruction and loss, not only of property but, alas, also of lives, in some of our sister Townships.

Having been thus blessed, in a negative way, during the past season, we do not so heavily feel the failure of a considerable portion of the Spring crops through the extraordinary drought of the summer. Hay, fall wheat and corn are, perhaps, the only crops that have reached what can be termed an average in quantity, but the extremely favourable weather for saving grain greatly enhanced the quality, which will materially assist in balancing the difference.

The annual Exhibition, held in September last, was a great success. There were over 390 entries, 95 of which were live stock, and we congratulate you on the very creditable display of animals. The horses and cattle, both as to numbers and quality, were really superior to the common displays at Township exhibitions. The grain exhibited was also very good, with the exception of oats and the potatoes, of which there were 15 entries, were somewhat prodigious, considering the unfavourableness of the season.

The commencement made this year in the erection of permanent structures for the accommodation of stock on exhibition, and the evident advantages gained by the little we have done in that way, warrant us in recommending that something more be done in the same line, the next season, and that a few dollars be expended in removing stumps and stones, and otherwise clearing the exhibition grounds.

We would also direct your attention to the circular of James Fleming & Co., of Toronto, respecting farm and garden seeds, which will be read to you, as we believe that a great advantage might be gained by the occasional introduction of new and fresh seeds. It is an al-

most universally acknowledged fact by agriculturists that a frequent and judicious change of seed augments the return, in some cases, as much as 50 per cent.

RUSSELL.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		5 00	
“ 75 Members’ Subscription		75 00	
“ Admissions to Show.....		15 19	
“ Legislative Grant.....		700 00	
“ For Special Prizes.....		200 78	
		-----	995 97
Cr.			
By Prizes for Live Stock.....	150 15		
“ “ Field Products.....	36 00		
“ “ Dairy “	31 00		
“ “ Horticultural Products.....	18 60		
“ “ Agricultural Implements.. ..	3 00		
“ “ Arts and Manufactures.....	33 50		
“ “ Growing Crops.....	22 85		
“ “ Ploughing Match	128 00		
		-----	423 10
“ L. G. to Township Societies.....		420 00	
“ Preparing Show Grounds . . .		5 00	
“ Keep of live Stock		5 00	
“ Working Expenses.....		141 40	
		-----	994 50

Balance in hand.....			1 47

REPORT.

Your Directors, in presenting their Report for the past year, beg leave to state that notwithstanding the excessive heat and drought of the past summer and autumn, it is matter for congratulation, that the continually improving system of cultivating the soil throughout this county, renders any apprehension of a scarcity for man or beast, vague and unnecessary; although regretting that the crops generally are below an average yield, we feel justified in saying that, on account of the remunerative prices paid for stock and all kinds of farm produce, the close of the year 1871, will find us, not only holding our ground, but in a highly prosperous condition.

In regard to our Society, we have simply to say, that apparently it is as full of life and vigour as ever, our Annual Exhibition having passed off with the usual élat, for which state of things, we have in no small measure, to thank the numerous friends and patrons of the Society, who so liberally contribute to its funds without expecting any direct benefit in return; such are truly the men who understand the importance of advancing the agricultural interests of the County. What a contrast between them, and too many of our farmers who cannot be induced to give one dollar to the funds of an Agricultural Society, whose sole aim and object is the development of the resources of the soil, as well as the arts and manufactures, so popular and pleasing a feature in our Agricultural Exhibitions.

We have pleasure in saying that some of our Branch Societies have wisely adopted the plan of expending their funds on the improvement of their breeds of cattle, sheep, &c., we hope soon to see others imitate the example.

Clarence.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		0 07	
“ Members’ Subscriptions.....		63 00	

DR.	\$ cts.	\$ cts.	\$ cts.
To Legislative Grant.....		43 95	
Miscellaneous Receipts.....		2 00	
		<hr/>	109 02
CR.			
By Prizes for Live Stock.....	46 50		
“ “ Field Products.....	27 15		
“ “ Arts and Manufactures.....	17 10		
	<hr/>	90 75	
“ Working Expenses.....		13 25	
		<hr/>	104 00
Balance in hand.....			5 02

Cumberland.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		5 20	
“ Members' Subscriptions.....		208 00	
“ Legislative Grant		147 90	
“ Municipal Grant.....		15 00	
		<hr/>	376 10
CR.			
By Prizes for Live Stock	111 00		
“ “ Dairy “	68 00		
“ “ Growing Crops	161 00		
	<hr/>	340 00	
“ Working Expenses.....		18 90	
		<hr/>	358 90
Balance in hand			17 20

REPORT.

Your Directors in submitting their Annual Report beg leave to state that the past season has been unprecedented in this part of the country for the long continued drought that prevailed, scarcely a shower falling from the putting in of the crop until it was harvested; and for the great damage done by fires, whereby many in the adjacent county lost their all—the earnings of years—although, by the blessing of God, none were actually burnt out in this Township. The loss of standing timber has been immense, and never can be remedied. Our crops, of course, suffered greatly, especially those on rocky or poor land; deep, loamy lands were but little affected by the excessive dryness of the season, giving a good return. Hay was very light, far below an average generally, but the quantity kept over from last year will keep the scarcity from being felt. Wheat was fair, and about an average, the wheat plant being less affected by a dry season than any other kind of grain. Oats were, almost a failure, except on deep, loamy soils. Barley, there is none raised; a little Bigg or Bere is sometimes sown; perhaps there should be more attention paid to raising barley. Peas were only half a crop. Potatoes light, half a crop, but sound and good to eat, which makes up in some measure for the deficiency of the crop. Turnips almost a failure. Carrots, none sown.

Your Directors would press on your attention the necessity there exists of paying more attention, and giving more encouragement to the raising of good stock, and improved seeds of every description; even your poultry would be greatly improved by an importation of new breeds.

Gloucester.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		4 36	
“ Members' Subscriptions.....		103 00	
“ Legislative Grant.....		71 86	
“ Rent of Society's Grounds.....		54 70	
		<hr/>	233 92

CR.	\$ cts.	\$ cts.	\$ cts.
By Prizes for Live Stock.....	78 60		
" " Field Products.....	5 50		
" " Dairy ".....	9 00		
" " Growing Crops.....	42 35		
	<hr/>		
	135 45		
Amount retained.....	3 80		
	<hr/>		
		131 65	
" Preparing Show Grounds ...		8 05	
" Working Expenses.....		73 75	
		<hr/>	
			213 45
			<hr/>
Balance in hand.....			20 47

REPORT.

Your Directors in presenting their Annual Report desire to thank the friends and patrons of the Society for their continued support, and especially to those who contributed to its funds without expecting any direct benefit in return.

In looking over our subscription list a number of names will be found, not of farmers, but of persons who subscribe for the purpose of patronizing the Society. Those persons are more alive to the importance of advancing the agricultural interest than many of the farmers themselves. It is to be regretted that so many of those engaged in agricultural pursuits are so indifferent to the improvement of stock, as well as the improved culture of the soil. Too many of the farmers lose sight of the real benefit and object of our agricultural societies, and will not subscribe one dollar to the funds unless they can take ten directly into their pockets, losing sight entirely of the benefit which they derive from that healthy spirit of emulation and rivalry created by competition with each other; and hence the cause of a great deal of up hill work your Directors have to contend with.

Your Directors would remark that the past season has been very unfavourable to the agriculturist in this part of the County, although not so disastrous to the crops as from the long continued heat and drought might have been anticipated, so that we have much reason to be thankful, and, as a Christian people, refer all our bounties to that God who sendeth rain upon the just and the unjust.

Osgoode.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		42 48	
" Members' Subscriptions.....		100 00	
" Legislative Grant.....		64 15	
" Proceeds Sale of LiveS tock.....		80 00	
		<hr/>	
			286 63
CR.			
By Purchase of Live Stock.....	204 00		
" Working Expenses.....	2 90		
	<hr/>		
			206 90
			<hr/>
Balance in hand.....			79 73

REPORT.

To the Secretary of the County Society :

SIR : I have much pleasure in informing you, on behalf of the Osgoode Agricultural Society, that we have made rapid improvement in the cattle department, which is the only department that our funds could accomplish, as yet. I believe it to be the most profitable for us, as the young stock we raise from those animals that we purchased for the Society show a great improvement in our stock of cattle, so much so that if we were willing to dispose of them we

could get a ready sale, and would command a high price, so that we are now beginning to reap the benefit of a well bred stock.

It is now our intention to cross Durhams and Ayrshires as soon as our funds will permit us to do so, as we believe that a grade from these breeds of cattle to be the most profitable for this section of country, since we require milking qualities as well as the production of beef.

If our efforts in the future prove as beneficial as in the past, we may look forward to the time when we shall be the owners of a superior herd of cattle to that which we now possess.

*

*

*

Russell.

DR.	\$ cts.	\$ cts.	\$ cts.
To 29 Members' Subscriptions		131 63	
" Legislative Grant.....		86 00	
		<hr/>	217 63
CR.			
By Balance due Treasurer.....		5 81	
" Prizes for Live Stock.....	82 85		
" " Field Products.....	24 25		
" " Dairy ".....	6 40		
" " Horticultural Products.....	7 23		
" " Arts and Manufactures....	36 92		
" " Growing Crops.....	25 35		
" " Ploughing Match.....	15 00		
	<hr/>	198 00	
" Working Expenses		32 00	
		<hr/>	235 81
			<hr/>
Balance due Treasurer.....			18 18

SIMCOE, NORTH.

DR.	\$cts.	\$ cts.	\$ cts.
To Balance in hand		92 80	
" 132 Members' Subscriptions.....		257 50	
" Admissions to Show.....		120 69	
" Legislative Grant.....		700 00	
" Miscellaneous Receipts.....		35 50	
		<hr/>	1205 89
CR.			
By Prizes for Live Stock.....	227 50		
" " Field Products.....	69 50		
" " Dairy ".....	28 00		
" " Horticultural Products.....	15 75		
" " Agricultural Implements.....	33 00		
" " Arts and Manufactures.....	45 75		
	<hr/>	419 50	
Unpaid.....	44 50		
	<hr/>	375 00	
" Prizes of Previous Year.....		22 00	
" L. G. to Township Societies.....		419 22	
" Preparing Show Grounds.....		47 63	
" Working Expenses.....		170 77	
		<hr/>	1034 62
			<hr/>
Balance in hand.....			171 27

REPORT.

The report of the Directors of the North Simcoe Agricultural Society respectfully sheweth that the reports of the Branch Societies, though apparently mailed in proper time, did not reach this Board before the day appointed for holding the annual meeting, and therefore the retiring Board were unable to draw up such a general report, upon the progress of Agriculture in this Riding, as should, in their opinion, emanate from the County Society. The following statements, therefore, though based upon the transactions of the past year, were drawn up by a committee of the present Board.

There is now existing, as will be seen by the document enclosed, a Branch Society in every Township or union of Townships in the North Riding.

* * * *

In the Muskoka District there is rapid progress being made in the introduction of good stock, and from the rapidly increasing facilities of communication the Directors hope to hear, before the close of the present year, that the establishment of fresh branches has been accomplished.

The North Riding of this County has, from a very early period, been noted for the good quality of the horned cattle which it has produced, good strains of Durham, Hereford and Devon blood having been introduced, almost with the first settlement of the County. This excellence has been maintained, and there are now few parts of the Riding where thoroughbred stock, especially short-horns, are not to be found. Galloways have been brought in of late years; but the short-horns chiefly prevail and many animals of this breed can be found of the highest quality, both as regards individual excellence and good breeding.

The sheep and pigs of the Riding have hardly kept pace hitherto with the cattle, but in both classes of animals, much progress has lately been made, and excellent sheep, chiefly of the long-woolled varieties, and pigs, of the improved Berkshire breed, are generally to be met with. The great variety of soil which prevails in the Riding naturally gives rise to the introduction of the breeds most suitable to the different localities, and this is a matter which calls for closer attention than it has hitherto received.

In the breeding of horses this Riding is more backward than in any other respect, and the attention of this Society has frequently been directed to the subject. The Directors are, therefore, glad to find that great improvement is now being made. The increase in the number of mares has made it profitable for well bred stallions to be sent up from the South, and farmers generally have now a sufficient choice for all purposes.

In regard to husbandry, the variety of soil prevailing and the broken nature of the county have made a mixed system the most profitable. Fall wheat, though sometimes grown of fine quality, has been found, on the whole, a precarious crop, and is not, therefore, so largely sown as in some of the adjacent districts, and Spring wheat, barley, oats and peas are the principal crops.

It is found from all the reports received, that last year Spring wheat, which may be considered as our staple article of export, was, generally, a poor crop, even in the township of Nottawasaga, which contains the finest wheat land in the Riding. This seems to have been chiefly owing to some peculiarity in the season which prevented the grain, though promising well at an early period of its growth, from coming to perfection. The Fall wheat, owing to winter killing, may be said to have been a total failure, and scarcely any has been brought to market.

The ravages of the midge, the Directors feel able to say, have greatly diminished. Barley, oats and peas were generally good, and hay has been very abundant. The lumbering carried on in the neighbourhood has, for some years, caused a good market for oats and hay, especially in the northern parts of the Riding; but, during the present winter, owing to the failure of the wheat crop, the farmers have paid more than usual attention to the fattening of cattle and hogs, and, in consequence, beef and pork of unusually good quality have been brought to market.

Owing to the heat and dryness of last summer, flies prevailed to an unusual extent, and cattle suffered accordingly, so that towards the close of the season their condition was low, and extra feeding was required.

The Directors are happy to say that they find from observation and from the reports sent in, that root crops, generally, are well attended to, a most important matter when stock

raising and feeding are found to answer. Due attention appears to be paid to this, by all the Branch Societies.

Coming now to the more immediate operations of this Society, the Directors can speak with satisfaction of the Annual Exhibition of 1870. Owing to their having the use of the drill shed and park adjoining for the purpose of the Exhibition, facilities now exist for raising funds from visitors which the Society never enjoyed before. For the first time in the operations of this Society, prizes were offered for animals in the various breeds of cattle and sheep, so that the prizes, though numerous, were necessarily smaller than usual.

The show of grain, though special prizes were offered by Mr. McConkey, the member for the County, and Mr. McCarthy, was, for the reasons already stated, a poor one; but that of dairy produce, for which a special prize was given by Mr. Ardagh, the warden, was unusually large and good.

For some few years past, the growth of horticultural productions has been promoted by this Society with good effect, and the display of these articles was very creditable. The show of roots of the larger kind was also very good.

*

*

*

*

Medonte and Flos.

Dr.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			53	37		
“ Members’ Subscriptions.....			97	00		
“ Legislative Grant.....			54	42		
					204	79
Cr.						
By Prizes for Live Stock.....	65	50				
“ “ Field Products	4	25				
“ “ Dairy “	6	50				
“ “ Horticultural Products	0	75				
“ “ Arts and Manufactures.....	9	00				
					86	00
“ Agricultural Publications.....			30	00		
“ Working Expenses			13	50		
					129	50
Balance in hand.....					75	29

REPORT.

Notwithstanding some drawbacks and hindrances, the year 1870 has been one rather of prosperity to this Society than otherwise. It is true the Annual Show was scarcely so large as in former years, the falling off being more visible in the produce of the dairy and domestic manufactures than in the stock department, in which a very marked improvement has taken place since the organization of this Society; and that, not only in the stock belonging to members of the Society, but in the neighbourhood generally. From all we can learn of last year’s crops in the townships of Medonte and Flos, Fall or winter wheat has been a failure—many fields having to be ploughed up in the Spring, owing to the young crops being so badly winter killed. It appears from all the information we can obtain, that winter killing was the cause of the failure, and not the midge, as in former years, that pest having almost disappeared in this neighbourhood, last year. Spring wheat, when sowed early, was an average crop, but the late sown was short and generally deficient in grain. Peas were an average crop. Barley was good, but owing to a few days of wet weather, when the crop was a harvesting, that in the low lands was slightly damaged. Oats were a heavy crop on most of the farms in the townships comprised by the Society; the yield was in excess of last year’s. Potatoes, turnips, carrots and mangel-wurtzel were a good crop, of which a much greater breadth is now cultivated than formerly.

Nottawasaga.

	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		53 18	
“ 219 Members' Subscriptions.....		262 00	
“ Admissions to Show.....		39 33	
“ Legislative Grant.....		127 68	
“ Municipal Grant.....		40 00	
		<hr/>	522 19
CR.			
By Prizes for Live Stock.....	187 00		
“ “ Field Products.....	37 00		
“ “ Dairy “.....	10 50		
“ “ Horticultural Products.....	8 00		
“ “ Agricultural Implements.....	40 00		
“ “ Arts and Manufactures.....	23 00		
“ “ Ploughing Match.....	29 00		
	<hr/>	334 50	
“ Preparing Show Grounds.....		34 33	
“ Working Expenses.....		69 22	
		<hr/>	438 05
Balance in hand.....			84 14

NOTE.—The Society is in a progressively improving state, and both Spring and Fall Shows were quite successful. Grain and roots in consequence of the unfavourable character of the season, were not so good as usual, but the live stock and dairy products were, on the whole, excellent.

Orillia.

	\$ cts.	\$ cts.	\$ cts.
DR.			
To 55 Members' Subscriptions.....		104 50	
“ Legislative Grant.....		59 28	
“ Proceeds Sale of Live Stock.....		35 75	
“ Miscellaneous Receipts.....		1 50	
		<hr/>	201 03
CR.			
By Balance due Treasurer.....		28 59	
“ Prizes for Live Stock.....	44 50		
“ “ Field Products.....	17 75		
“ “ Dairy “.....	4 50		
“ “ Horticultural Products.....	4 50		
	<hr/>	71 25	
“ Purchase of Live Stock.....		44 65	
“ Working Expenses.....		34 81	
		<hr/>	179 30
Balance in hand.....			21 73

REPORT.

The Directors, in presenting the annual report for 1870, beg to draw your attention to the fresh introduction of stock by their purchase, last Spring, of a young Durham bull. Previous to its last annual meeting the Society had disposed of its Devon bull, in order to meet the wishes of a majority of its members, who thought a change of breed necessary.

* * *

The show held in October last was, as a whole, considered good. There was a decided improvement in milch cows; some very fine young cattle and sheep were on the grounds, but in other respects there was little improvement on former shows. The departments of grain,

roots and dairy produce were fairly represented, although the agricultural produce, for the season, was rather unsatisfactory.

	*	*	*
	<i>Oro.</i>		
Dr.	\$ cts.	\$ cts.	\$ cts.
To 108 Members' Subscriptions		125 00	
" Legislative Grant		55 86	
			180 86
Cr.			
By Prizes for Live Stock	65 75		
" " Field Products	24 00		
" " Dairy "	7 50		
" " Horticultural Products	3 00		
" " Arts and Manufactures	2 50		
" " Ploughing Match	20 00		
		122 75	
" " of previous year		28 50	
" Preparing Show Grounds		12 00	
" Agricultural Publications		13 50	
" Working Expenses		29 15	
			205 90
Balance due Treasurer.			25 04

REPORT.

Your Directors would congratulate you, that during the past year they have been enabled to add some thirty names to the list of members, making 108, and subscribing, in the aggregate, together with the Legislative Grant, \$180 at present. The members appear to take a lively interest in the Society. A ploughing match in the fall caused the youth of the Township to take more interest in their *calling*, and no doubt if continued annually it would be a great benefit to the community at large.

The annual show was well attended, and as every one can exhibit without limitation for \$1, it is not strange that so many availed themselves of the privilege. Over 300 entries were made with the Secretary. Unfortunately the weather proved unfavourable; it rained, or rather poured, from noon till night. The live stock was very good, quite a number of fine animals being brought forward for exhibition, which were much admired by the judges. The grain was fair, but not equal to former years. The wheat was somewhat injured when coming out in head, so that the quantity was small, but sound, and would make good bread. It is a question whether there was as much wheat raised in the Township as will be required by its inhabitants till next harvest. All the first prizes in wheat went to farmers settled on high lands, where the snow leaves soon and seeding commences early in the Spring; whilst the first prizes in cattle went to farmers settled on rich soils, and well watered, and where careful breeding had been attended to.

There is nothing to report in the mechanical and arts departments. Whether the railroad now being built through the Township leading to the Muskoka district will bring settlers into the Township, who will start a cheese factory, remains to be seen. A portion of the Township through which the railroad is being run is much better suited for grazing purposes than for grain; so that if this report should meet the eye of any capitalist willing to enter into the cheese-making business, a more suitable locality cannot be found.

Sunnidale.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		16 00	
" 50 Members' Subscriptions		50 50	

DR.	\$ cts.	\$ cts.	\$ cts.
To Admissions to Show.....		5 00	
" Legislative Grant		28 50	
" Municipal Grant.....		20 00	
" Miscellaneous Receipts.....		3 00	
		<u>123 00</u>	
Cr.			
By Prizes for Live Stock	38 25		
" " Field Products	13 70		
" " Dairy "	6 50		
" " Horticultural Products.....	4 70		
" " Arts and Manufactures.....	12 90		
" " Ploughing Match.....	16 00		
		<u>92 05</u>	
" Prizes of previous year.....		5 10	
" Working Expenses.....		21 74	
		<u>118 89</u>	
Balance in hand.			<u>4 11</u>

Tiny and Tay.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		23 08	
" 51 Members' Subscription.....		59 00	
" Admissions to Show.....		1 50	
" Legislative Grant.....		33 63	
" Proceeds Sale of Seeds.....		110 59	
		<u>227 80</u>	
Cr.			
By Prizes for Live Stock.....	34 00		
" " Field Products	11 75		
" " Dairy "	1 25		
" " Horticultural Products.....	2 75		
" " Arts and Manufactures.....	4 50		
		<u>54 25</u>	
Unpaid	13 50		
		<u>40 75</u>	
" Ploughing Match.....		126 94	
" Purchase of Seed		40 35	
" Working Expenses.....		<u>208 04</u>	
Balance in hand.....			<u>19 76</u>

REPORT.

* * * *

The Annual Show of stock, &c., held on the 25th October, was not as good as usual. Owing partly to the weather, a good many entries were not brought forward; yet what was brought on the ground showed a decided improvement.

The crops have fallen far short of what the farmers could wish. Fall wheat was almost a total failure. Spring wheat was a good sample, it being free from midge, rust, &c., but the yield was below the average.

Your Directors would suggest to the farming community the necessity of putting in their cereals much earlier in the season than has hitherto been the practice. Oats and barley did not turn out as well as usual. The same may be said of peas, the yield being far below that of last year. Other crops have done pretty well.

Taknig all things into consideration, we have much to be thankful for. Prices have been good, and will go far in making up for any deficiency.

*

*

*

*

Vespra.

DR.	\$ cts.	\$ cts.	\$ cts.
To 66 Members' Subscriptions		111 75	
" Legislative Grant.....		59 85	
		<hr/>	171 60
CR.			
By Balance due Treasurer.....		5 32	
" Prizes for Live Stock	78 25		
" " Field Products	10 50		
" " Dairy "	5 50		
" " Horticultural Products.....	3 00		
" " Arts and Manufactures.....	2 50		
" " Growing Crops.....	15 00		
	<hr/>		
	114 75		
Unpaid.....	24 25		
	<hr/>		
" Agricultural Publications.....		90 50	
" Working Expenses.....		49 00	
		<hr/>	169 32
			<hr/>
Balance in hand.....			2 28

REPORT.

*

*

*

In order to make the Exhibition as attractive and useful as possible, your Directors offered as extended and liberal a prize list as the funds at their command would admit. Although the entries were not as numerous as in the preceding year, the prizes offered were all taken up, and the animals and articles shown were of very superior description. On the whole the Exhibition was a very creditable one, and attracted a great many visitors. The Town Hall grounds are now enclosed by a substantial fence, and when furnished with pens, which are much needed, the Township of Vespra will have one of the best Exhibition grounds in the County.

In respect to the progress in population, wealth and general improvement, the Township is making, your Directors have much pleasure in reporting that, though it may be slowly, it is surely making good headway. The bush lands, which are at all fit for cultivation, are becoming settled. The old cleared farms are being brought under a better state of cultivation. More interest is taken in horticulture. Good fruits are now produced, and orchards are being planted where hitherto neglected, labour saving implements and machinery are becoming indispensable, and handsome dwelling houses and good substantial out-buildings are replacing the old makeshift ones.

On the other hand, as a drawback, this Township has a large quantity of sandy and swampy lands, which will be quite worthless when stripped of their timber; but there are some thousands of acres of the finest land, comprising the valley of the Nottawasaga River, now lying idle and worthless on account of the overflowing of the river in the spring freshets. If they could be drained, they would furnish homes for a large number of families, and contribute largely to the prosperity of the Township.

A movement has been set on foot, in which the M. P. and the M. P. P. and other influential gentlemen of the Riding have taken part, to accomplish this desirable end. If it be found at all practicable, there is no doubt but ways and means will be found to carry it out.

*

*

*

*

SIMCOE, SOUTH.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		429 80	
“ Members’ Subscriptions.....		326 00	
“ Admissions to Show.....		178 50	
“ Legislative Grant		700 00	
“ Special Subscriptions.....		164 65	
		— —	1798 95
CR.			
By Prizes for Live Stock	384 50		
“ “ Field Products.....	94 00		
“ “ Dairy “	17 00		
“ “ Horticultural Products.....	38 00		
“ “ Agricultural Implements	107 00		
“ “ Arts and Manufactures	90 09		
“ “ Reaping Match.	36 00		
“ “ Ploughing Match	70 00		
	836 50		
Unpaid	40 50		
	— —	796 00	
“ L. G. to Township Societies.....		382 34	
“ Preparing Show Grounds.....		179 16	
“ Premiums of previous year.....		40 50	
“ Working Expenses.....		102 85	
		— —	1500 85
			298 10
Balance in hand.....			

REPORT.

Your office-bearers, in presenting this, the thirteenth Annual Report of the proceedings of the past year, are happy to be able to speak very favourably of the present prosperous condition of the Society; and, notwithstanding the rapid advancement made, and the large share of public confidence enjoyed, yet it might be very materially increased by the united efforts of the friends of the Society.

Your Directors have, during the past year endeavoured by the holding of Shows, &c., to introduce to the notice of the farming community, something special in the way of stock and agricultural implements, which they think has partially, if not fully, answered the purpose intended, viz., the stimulating and encouraging the introduction of improved breeds of animals, and the manufacture and introduction of improved agricultural implements.

Our Spring Show was held at Bond Head, on the 27th April of last year, and far exceeded any show of the kind ever before held by this Society.

The reaping match, under the auspices of the Society, was held on the 20th day of July, on the farm of Mr. Samuel Carswell, and was very well attended, there being quite a number of reapers on the ground, and the competition very keen, displaying excellent work, and giving the farming community an opportunity of judging for themselves of the merits of the different machines.

Our Fall Show, as you are aware, was held on the 29th and 30th September, and notwithstanding the very inclement weather, passed off with much more than ordinary success; the number of entries being unprecedented in the history of the Society, as the following list will show, viz.,—horses, 180; thoroughbred cattle, 14; grade cattle, 90; sheep, 168; pigs, 52; poultry, 55; Seeds, 9; grain, 94; roots, 181; dairy produce, 117; fruit, 112; implements, 114; ladies’ work, 300; making a total of about 1,500 entries; and those who are in the habit of attending our annual exhibitions could not fail to remark the rapid improvement which has been made in all the departments, even during the past year; and your Board would here state that the success in numbers, and indeed the quality of the articles

entered, has, to a great extent, been brought about by those gentlemen who came forward and contributed so liberally to the special prize list.

The financial state of the Society is also a matter of congratulation, when you take into account the amount of money that has been expended on the grounds during the past year, as the Treasurer's Report will show. Your Board, in connection with the Corporation of this municipality, having during the year expended no less a sum than \$285.00, in draining, levelling, and otherwise improving said grounds.

* * * * *

Essa.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		22 29	
" 95 Members' Subscriptions.....		100 00	
" Admissions to Show		15 15	
" Legislative Grant		52 30	
		<hr/>	189 74
CR.			
By Prizes for Live Stock	77 50		
" " Field Products	22 00		
" " Dairy	3 00		
" " Horticultural Products	12 00		
" " Agricultural Implements.....	23 50		
" " Arts and Manufactures	17 00		
	<hr/>	155 00	
" Working Expenses.....		35 05	
		<hr/>	190 05
			<hr/>
Balance due Treasurer.....			0 31

NOTE.—The Society continues steadily to improve, and its last exhibition was fully equal, if not superior to the average of such occasions.

Innisfil.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		38 63	
" Members' Subscription... ..		127 00	
" Admissions to Show.....		14 50	
" Legislative Grant.....		66 42	
" Miscellaneous Receipts.....		7 35	
		<hr/>	253 90
CR.			
By Prizes for Live Stock	108 50		
" " Field Products.....	32 25		
" " Dairy	6 00		
" " Agricultural Implements.....	22 50		
" " Arts and Manufactures.....	22 50		
	<hr/>	191 75	
" Working Expenses, (including two year's printing).....		50 15	
		<hr/>	241 90
			<hr/>
Balance in hand.....			12 00

NOTE.—Crops generally, considerably below an average, owing to the unfavourable character of the season; notwithstanding, the Fall Exhibition was not much behind its most successful predecessors. In agricultural implements, it was better than usual. More interest is being taken in the breeding and management of live stock, generally. The improvement of late in pigs has been distinctly observable, the Berkshire taking the lead. In sheep, the Leicesters and Cotswolds take the lead, and among cattle the Durham continues to advance in popular favour.

Mulmur.

DR.	\$	cts.	\$	cts.	\$	cts.
" To Balance in hand			9	00		
" 113 Members' Subscriptions			128	00		
" Admissions to Show			17	10		
" Legislative Grant			66	96		
" Miscellaneous Receipts			11	40		
					232	46
CR.						
By Prizes for Live Stock.....	63	00				
" " Field Products.....	27	00				
" " Dairy "	9	00				
" " Horticultural Products	11	50				
" " Agricultural Implements.....	20	00				
" " Arts and Manufactures.....	21	50				
" " Ploughing Match.....	13	00				
	165	00				
Unpaid.....	2	00				
			163	00		
" Working Expenses.....			38	25		
					201	25
Balance in hand.....					31	21

Tecumseth.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			46	47		
" Members' Subscriptions.....			179	75		
" Legislative Grant			104	60		
" Municipal Grant.....			25	00		
" Miscellaneous Receipts.....			12	54		
					368	16
CR.						
By Prizes for Live Stock.....	140	00				
" " Field Products.....	34	00				
" " Dairy "	5	25				
" " Horticultural Products.....	9	50				
" " Agricultural Implements.....	15	00				
" " Arts and Manufactures.....	23	25				
			227	60		
" Preparing Show Grounds.....			7	00		
" Working Expenses.....			44	70		
					278	70
Balance in hand.....					89	46

REPORT.

* * * *

Your Directors congratulate the members on the present position of this Society, both as regards financial matters, and also the improvements made each year in the mechanical and domestic manufactures.

The Society held their Spring Show for the exhibition of entire horses and bulls in the Village of Bond Head, on the 27th of April, 1870, and was fully ahead of any of its predecessors.

The horses made a good display, among which were some very fine imported animals, which drew the attention of the farmers, and the consequence was a much larger attendance than is usually seen at Spring Shows.

Our Fall Show was held in the Village of Penville, on the 14th of October, and was also decidedly successful. The day was all that the most fastidious could desire, and the consequence was a large crowd of exhibitors and spectators, and the various departments were pretty keenly contested, with the exception of the mechanical, which was not generally well represented.

A variety of potatoes shown by Mr. Wm. Root, of Clarksville, composed of forty-six different kinds attracted no small share of attention. The same gentleman raised 100 bushels of the Harrison potato from 3½ bushels of seed.

We must not forget to mention the very fine assortment of dressed and undressed cloths and flannels shown from the factories of Messrs. Dennis, Towns & Brown; indeed they are a credit to the neighbourhood for their proficiency in cloth dressing.

	*	*	*	*
<i>Tossorontio.</i>				
DR.		\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....			129 49	
“ Members’ Subscriptions.....			191 50	
“ Admissions to Show.....			106 20	
“ Legislative Grant			92 06	
“ Miscellaneous Receipts.....			10 00	
			-----	529 25
CR.				
By Prizes for Live Stock.....		139 00		
“ “ Field Products.....		45 00		
“ “ Dairy “		18 00		
“ “ Horticultural Products.....		29 25		
“ “ Agricultural Implements		57 50		
“ “ Arts and Manufactures.....		38 50		
“ “ Ploughing Match.....,		25 00		
			-----	352 25
“ Preparing Show Grounds.....			8 00	
“ Working Expenses.....			59 21	
			-----	419 46

				109 79

NOTE.—The Fall Show comprised 503 entries. Several classes were of good quality. “ Winter wheat in this section was a total failure, owing to the heavy fall of snow.”

STORMONT.

DR.		\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....			212 10	
“ 108 Members’ Subscriptions ..			112 00	
“ Legislative Grant.....			700 00	
“ Proceeds Sale of Seeds.....			172 61	
			-----	1136 71
CR.				
By Prizes for Live Stock		191 00		
“ “ Field Products		61 00		
“ “ Dairy “		21 50		
“ “ Horticultural Products		26 00		
“ “ Agricultural Implements.....		98 50		
“ “ Arts and Manufactures.....		72 75		
			-----	470 75

	\$ cts.	\$ cts.	\$ cts.
By L. G. to Township Societies.....		420 00	
“ Preparing Show Grounds		19 50	
“ Purchase of Seeds		144 52	
“ Working Expenses.....		62 05	
		<u>1116 82</u>	
Balance in hand.....			19 89

Finch.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		1 87	
“ Members' Subscriptions.....		62 50	
“ Admissions to Show.....		5 00	
“ Legislative Grant.....		137 78	
		<u>207 15</u>	
CR.			
By Prizes for Live Stock.....	80 00		
“ “ Field Products.....	19 50		
“ “ Dairy “	12 50		
“ “ Horticultural Products.....	11 00		
“ “ Agricultural Implements.....	14 50		
“ “ Arts and Manufactures.....	16 00		
“ “ Ploughing Match.....	17 00		
	<u>170 50</u>		
“ Preparing Show Grounds.....		3 00	
“ Working Expenses.....		33 20	
		<u>206 70</u>	
Balance in hand.....			0 45

Osnabruck.

DR.	\$ cts.	\$ cts.	\$ cts.
“ 59 Members' Subscriptions.		78 00	
“ Legislative Grant.....		166 67	
		<u>244 67</u>	
CR.			
By Balance due Treasurer.....		3 00	
“ Prizes for Live Stock.....	123 00		
“ “ Field Products.....	20 50		
“ “ Dairy “	6 50		
“ “ Horticultural Products.....	8 50		
“ “ Agricultural Implements.....	19 00		
“ “ Arts and Manufactures.....	17 50		
	<u>195 00</u>		
“ Preparing Show Grounds.....		11 00	
“ Working Expenses.....		23 25	
		<u>232 25</u>	
Balance in hand			12 42

Roxborough

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		5 04	
“ 56 Members' Subscriptions.....		58 00	
“ Legislative Grant		115 55	
		<u>178 59</u>	

CR.	\$ cts.	\$ cts.	\$ cts.
By Prizes for Live Stock.....	61 00		
" " Field Products.....	15 50		
" " Dairy ".....	7 00		
" " Horticultural Products.....	8 00		
" " Agricultural Implements.....	9 25		
" " Arts and Manufactures.....	20 00		
	<hr/>	120 75	
" Preparing Show Grounds.....		9 70	
" Working Expenses.....		11 16	
		<hr/>	141 61
Balance in hand			36 98

TORONTO.

DR.	\$ cts.	\$ cts.	\$ cts.
To 98 Members' Subscriptions.....		243 00	
" Admissions to Show.....		134 30	
" Legislative Grant.....		274 50	
		<hr/>	651 80
CR.			
By Balance due Treasurer.....		13 26	
" Prizes for Fruits.....	18 25		
" " Flowers and Plants.....	92 00		
" " Vegetables.....	28 75		
	<hr/>	139 00	
" " of previous year.....		129 40	
" 44 Memberships of Agricultural Association.....		44 00	
" Memberships of Fruit Growers Association.....		2 00	
" Preparing Show Grounds.....		83 50	
" Agricultural Publications.....		25 05	
" Working Expenses.....		158 19	
		<hr/>	594 40
Balance in hand.....			57 40

REPORT.

The Directors beg to submit the following report of their proceedings during the past year:—

During the year 1870 only one Exhibition was held under the auspices of the Society, which took place in the Horticultural Gardens. By a resolution of the Directors it was decided not to hold a Spring Exhibition on account of the lateness of the season and other adverse circumstances; also as the Provincial Exhibition was held in Toronto in September, it was thought advisable not to hold a Fall Exhibition, but that the members of this Society should devote all their energies to the support of the Provincial Exhibition.

The summer show, by the courtesy of the Managers of the Horticultural Society, was held in the Horticultural Gardens, on Thursday, 14th July. The display of plants and flowers was the best we have had for many years at our Summer Exhibitions. In cut flowers all the novelties of the season were shown. The display of greenhouse plants was very good. Among the hot-house varieties there were some rare specimens of foliage plants. East India palms, orchids &c., were the most attractive. These were principally from the conservatories of the Hon. D. L. Macpherson, the Hon. Justice Morrison, C. S. Gzowski, Esq., and T. C. Chisholm, Esq.

The show of fruit at the July Exhibition was rather below the average in quantity owing, doubtless, to the peculiarity of the season. Cherries head the list in number of en

tries, and some very fine specimens were placed on the tables, the most valuable and conspicuous varieties being Reine Hortense, Black Eagle, Black Tartarian, Napoleon, Biggareau and May Duke. Currants were extra fine, the red cherry, as usual, taking the first prize in the red class, white grape ditto in the white class, and black Naples ditto in black class. Of hot-house grapes a few samples, ripe, were shown by Mr. T. C. Chisholm's gardener. In gooseberries some fine specimens were shown by Mr. Scadding, in a green state, but of large size and free from mildew. Of orchard house trees some dozen or so, full of fruit, were shown by Mr. Gzowski's gardener. Raspberries were shown in small quantity, the Franconia, red, and Brinckle's orange still keeping first rank. The season for strawberries was nearly passed, and in consequence but few were shown. Of these Triomphe de Gand and Wilson's Albany took the lead as in former years, and a dish of Dr. Micaïsse also came in for a premium.

The principal exhibitors were Hon. D. L. Macpherson, and Messrs. Gzowski, Chisholm, Leslie, Logan, Hirschfelder, &c.

In vegetables some fair specimens were exhibited, but the quantity was not large and calls for no special remark. The principal exhibitors were the Hon. D. L. Macpherson, and Messrs. Tattle, Logan, Fleming and Blake.

Each year in which the Provincial Exhibition is held in this city it is customary to dispense with the usual Fall Exhibition of this Society and unite with the Agriculture and Arts Association. Your Directors felt they would not be justified in deviating from the usages of the past years in this respect, and therefore made all their members who had paid not less than two dollars as their annual subscription for 1870, members of the Association for that year.

The results of the Provincial Exhibition have been made so familiar to you, by the daily press and by your own observation, that it is not necessary to refer to it here any further than to record its unexampled success, not only as compared with former years, but on its own particular merits. It was an undoubted credit to our Province, and was so considered by its numerous foreign and domestic visitors.

It may be noticed, however, that the gentlemen, who have been constant exhibitors for years at the Exhibitions of this Society, met with very great success at the Provincial Exhibition, no less than 46 prizes in the fruit and wine departments being obtained by them; in garden vegetables 37 prizes, and in plants and flowers 30 prizes. Many of these were the most valuable prizes offered by the Agricultural Association. Of the fruit entries particular mention may be made of the first prize by John Grey & Co., in all the entries of hot-house grapes. First prize by George Leslie & Son, for 30 varieties and 20 varieties of apples, and best display of fruit; six Duchesse d'Angoulême pears, exhibited by R. Stibbard, which weighed 9 lbs. 4 ozs.; and prizes for open air grapes by Thos. Brownlee, James Brown, and J. Forsyth.

In view of the distance from this city at which the Provincial Exhibition is to be held during this year, your Directors would suggest to their successors that an effort be made to unite with neighbouring Societies in holding a good Union Exhibition in this city during the ensuing Autumn.

Your Directors are pleased to learn that the Commissioner of Agriculture has consented to introduce a Bill amending the Agricultural Act, one provision of which will place this Society in the same position as similar Societies, in respect to the proportion of money to be raised to entitle the Society to draw the full amount of the Government Grant.

Your Directors would also express the gratification they feel in the proposed establishment, by the Government, of Agricultural and Technical Colleges in this Province, believing that if wisely conducted, such institutions will not only be an honour to the Province, but will help to induce in the minds of our youth—now so prone to crowd into the genteel professions, or into mercantile employments—a stronger desire and taste for industrial pursuits, either on the farm or in the workshop. Science, combined with industrial occupation, will at once render the latter respectable.

Your Directors congratulate you upon the general prosperity attending the various industries of the Province, and trust it augurs a large degree of prosperity to our Society during the ensuing year.

VICTORIA, NORTH.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		113 27	
“ 94 Members' Subscriptions		100 00	
“ Admissions to Show		8 25	
“ Legislative Grant		700 00	
“ Miscellaneous Receipts.....		12 55	
		<u>934 17</u>	
CR.			
By Prize: for Live Stock.....	127 75		
“ “ Field Products.....	34 50		
“ “ Dairy “	12 25		
“ “ Horticultural Products.....	13 50		
“ “ Agricultural Implements.....	2 50		
“ “ Arts and Manufactures.....	38 75		
“ “ Ploughing Match.....	30 00		
	<u>259 25</u>		
Unpaid.....	74 45		
		<u>184 80</u>	
“ L. G. to Township Societies.....		414 09	
“ Preparing Show Grounds.....		2 00	
“ Ploughing Match.....		30 00	
“ “ Agricultural Publications.....		15 00	
“ Working Expenses.....		98 17	
		<u>744 06</u>	
Balance in hand.....			190 11

REPORT.

Your Directors have reason to congratulate you on the increase in the number of members, as well as in the number of entries of articles exhibited at our last Fall Show—the latter being 700 against 408 in 1869.

* * * * *

The Show in every other respect was a decided success. The inside department particularly, was deserving of praise.

The Ploughing Match, in connection with the Society, was also successful, and in this connection your Directors regret that the Committee should allow themselves to be influenced by the dissatisfaction of any party interested, as such attempts at allaying discontent seldom lead to any beneficial result, but on the other hand establish a precedent highly injurious to the harmonious and successful working of the Society.

Your Directors took steps to obtain the services of a thorough-bred horse to travel through the Riding last spring, but not receiving the necessary aid from each of the Branch Societies, whose interests would thereby be secured equally with our own, the matter was allowed to drop. They would urge, however, upon their successors in office, the desirability of resuming the matter, as the introduction of a superior class of horses into the Riding ought to receive the warm support of every man interested in its prosperity.

With respect to the two new varieties of wheat received by the Society in the fall of 1868, from Mr. Weld, of London, viz.: the Treadwell and American Amber, your Directors have to report that of the samples sent to Fenclo the Treadwell was found to stand the winter better than either the Soules or American Amber, yielding at the rate of 25 bushels to the acre, while the Soules yielded but 12. The American Amber did not turn out nearly so well as the Treadwell, though better than the Soules. This, however, cannot be considered a fair test of the American Amber, as the seed received from Mr. Weld was found to consist of no less than six different varieties of wheat.

* * * * *

Upon the whole, the year 1870 witnessed a vast improvement in the affairs of the Society, and if it continues to advance in the same rate that it has done each year since its organization, it will not be many years ere it will take a first rank among the agricultural societies of our country,

The two lines of railway, the one near completion and the other in course of construction, through our Riding cannot fail to have a very beneficial effect upon the prosperity of this part of the country; while they will afford increased facilities for the transportation of farm produce, they will at the same time afford opportunity for the introduction of a more thorough, extensive and improved system of agriculture and horticulture than is at present carried on in our midst, so that we may hail the day as not far distant when the North Riding of Victoria will not be far behind the most flourishing portion of our fair Province in intelligence, prosperity and happiness.

Bexley, Saxon and Digby.

DR.	£ cts.	\$ cts.	¢ cts.
To Balance in hand.....		8 19	
" 55 Members' Subscriptions.....		55 00	
" Admissions to Show.....		4 00	
" Legislative Grant.....		70 95	
" Miscellaneous Receipts.....		2 00	
			140 14
CR.			
By Prizes for Live Stock.....	74 25		
" " Field Products.....	32 25		
" " Dairy ".....	8 25		
" " Arts and Manufactures.....	13 75		
	128 50		
Unpaid.....	40 75		
		87 75	
" Prizes of previous year.....		6 00	
" Preparing Show Grounds.....		3 00	
" Working Expenses.....		23 76	
			130 51
Balance in hand.....			9 63

Fenelon.

DR.	£ cts.	\$ cts.	\$ cts.
To Balance in hand.....		56 12	
" 55 Members' Subscriptions.....		55 00	
" Admissions to Show		6 00	
" Legislative Grant.....		70 50	
" Miscellaneous Receipts.....		11 81	
CR.			199 43
By Prizes for Live Stock.....	61 75		
" " Field Products.....	19 30		
" " Dairy ".....	5 95		
" " Horticultural Products.....	5 75		
" " Agricultural Implements	2 75		
" " Arts and Manufactures.....	18 00		
		113 50	
" Preparing Show Grounds.....		20 15	
" Purchase of Seed		9 35	
" Working Expenses.....		12 56	
			155 56
Balance in hand.....			43 87

Muskoka.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		176 10	
" 67 Members' Subscriptions		78 00	
" Legislative Grant		77 00	
" Miscellaneous Receipts		4 50	
		<u>335 60</u>	
CR.			
By Prizes for Live Stock.....	83 50		
" " Field Products.....	19 50		
" " Dairy "	8 00		
" " Horticultural Products.....	4 50		
" " Arts and Manufactures.	6 00		
	<u>121 50</u>		
" Prizes of previous year.....		3 00	
" Preparing Show Grounds.....		17 42	
" Working Expenses		64 03	
		<u>205 95</u>	
Balance in hand.....			129 .65

Eldon.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		82 47	
" 101 Members' Subscriptions		101 00	
" Admissions to Show.....		17 25	
" Legislative Grant.....		130 29	
" Miscellaneous Receipts.....		5 00	
		<u>336 01</u>	
CR.			
By Prizes for Live Stock.....	53 25		
" " Field Products.....	13 00		
" " Dairy Products.....	6 00		
" " Horticultural Products.....	5 50		
" " Agricultural Implements	6 50		
" " Arts and Manufactures.	12 30		
" " Ploughing Match.....	15 00		
	<u>111 55</u>		
" Prizes of previous year.....		4 00	
" Preparing Show Grounds.....		6 00	
" Purchase of Stock.....		27 00	
" Working Expenses.....		33 08	
		<u>181 63</u>	
Balance in hand			154 38

VICTORIA, SOUTH.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.		210 15	
" 73 Members' Subscriptions		83 00	
" Admissions to Show.		88 60	
" Legislative Grant.....		700 00	
		<u>1081 75</u>	
CR.			
By Prizes for Live Stock.....	138 50		
" " Field Products.....	61 00		

	\$	cts.	\$	cts.	\$	cts.
B. Prizes for Dairy Products		17	50			
" " Horticultural Products.....		38	25			
" " Agricultural Implements.....		22	50			
" " Arts and Manufactures		45	50			
" " Ploughing Match		22	00			
		345	25			
Unpaid.....		12	45			
				332	80	
" Prizes of previous year.....				21	25	
" L. G. to Township Societies.....				458	00	
" Preparing Show Ground				36	11	
" Working Expenses.....				112	84	
						961 00
Balance in hand.....						120 75

REPORT.

The Fall Exhibition was held in Lindsay on the 28th September, and on the whole was fair; in some departments being better than in 1869, and in others not so good. The number of entries was 632, against 596 in 1869. The amount of premiums paid was \$302.80 against \$365.25 in 1869. The receipts at the door of 10 cents each \$88.60, against \$93.50 in 1869. The number of members 83 against 103 in 1869. The show of horses and sheep exceeded that of the previous year. We had expected to see a better show of pigs than on former occasions, but we are sorry to say that we were disappointed.

Wheat, barley, oats and peas were fair, although we observed many inferior samples of Spring wheat, which strongly impressed us with the belief that most of our varieties of this cereal are deteriorating year after year; and while here making reference to this production we are reminded that our wheat-buyers have complained very much this winter of the samples brought to market being far from pure; in many instances they find a mixture of cockle, barley and oats, and also a mixture of different varieties of wheat: this being the case we very much regret that more care is not exercised in sowing good clean seed and keeping distinct varieties from intermixing, as well as in keeping the land free from noxious weeds.

The exhibition of farm implements and pleasure carriages was far in advance of any previous show, and it is a gratifying sign of progress to see so many of our farmers supplying themselves with the best modern farming implements and labour-saving machines.

The show of fruit was not quite equal to that of last year, although there were some very fine specimens of apples and also of plums, but owing to the latter ripening earlier than usual in the past summer, the season was over for these when the show was held; and with reference to apples, the Codlin moth had committed great havoc in a great many orchards.

There were a few fine bunches of out-door grapes exhibited respectively by Mr. John Knowlson, of Lindsay, and his brother, of Omamee, and also by Mr. Wood and Mr. Watson of Lindsay. The show of melons was the best we have seen.

The display of roots and vegetables was all that could be desired as to quality and quantity.

In the ladies' department and domestic manufactures the number of articles appeared to be somewhat less than we had witnessed in some former years, although there were many of merit which attracted the visitors to that portion of the hall set apart for them.

The dairy department was fair as usual, still it showed no great advance over former years' productions. We would strongly recommend increased attention and exertion in the direction of dairy farming, for we are convinced if carried on systematically, and even with ordinary skill, it will be found a more certain source of revenue than that of depending so much on cereals. This branch of farming not only does not exhaust the fertile qualities of

the land, but positively tends to restore and recuperate what has already been exhausted. The conviction has forced itself on our minds that too much attention cannot now be turned towards increasing both the quality and number of milch cows, with a view not only to increase our dairy productions, but also to meet the demand for this class of animals from the United States, whose buyers are constantly among us.

We find, on careful inquiry, that cheese factories in various parts of the Province are proving remunerative, and we are happy to see that a commencement has been made in our own Riding in that direction, and which we trust will be successful.

In seeding down for either meadow or pasture our experience seems to point to the Fall as being better than the Spring for sowing timothy seed, but not so for clover seed.

We would beg to draw attention to the progress making in the culture of fruit trees, and trust that we shall annually see our brother farmers continuing to enlarge their orchards and gardens, and advise them to be sure when ordering trees to procure the best varieties from reliable nurserymen.

The greatest drawback which our farmers are experiencing is the light yield of fall wheat, which is proving to be not more than half an average, owing to partial winter-killing the previous winter, and the long succession of dry weather in the early part of the summer.

We find little or no complaints of midge this season. Experience is beginning to shew the advantages of under-draining—a branch of farming which should at all times engage the serious attention of the farmer and also the gardener—likewise the planting of trees for shelter, and wind-breaks in and around their farms and gardens. It is anything but a pleasing sight to see so many naked homesteads, exposed to the bleak blasts of winter without a tree to protect, or a shrub or flower to ornament them. We say to the owners of such comfortless looking erections: plant, plant, and if you don't expect to live to enjoy their beauty and usefulness yourself, your children will, and they cannot fail to thank you as their benefactors. We admit that the barn and dwelling house must first engage your attention, but when these have taken their proper places, and your fields fenced and in good condition, it is then time to think of making ornament minister to utility. Your children luxuriating amongst fruit and ornamental trees and vines will make the memory of home sweet to them in their after years, and refine their feelings as well. And again, along with these endearing and refining objects, we say: Fail not to afford your sons and daughters a good education, and impress upon their minds the dignity and blessedness of labour, the virtue of truth, honesty, and fairness in their dealings with their fellow men; place good and wholesome reading in their hands, and only such; teach them to spend less in adorning the person and more in adorning the mind; more that is useful and less of worthless display, and by doing this you will gain for them the esteem and respect of the worthiest and most intelligent portion of the community, as well as putting them on the road on which they may aspire to posts of eminence in whatever sphere of after life they may be placed.

In looking at the many dilapidated and worn-out fences which meet the eye in many parts of the riding amongst the first settlers, and the nearly total disappearance of rail timber wherewith to renew them, we think it is high time that serious attention should be given as to the best and cheapest modes of fencing, for it must shortly become an interesting subject to farmers generally.

We have noticed with pleasure during the past year the erection of many new substantial farm dwellings and out-buildings of both brick and wood, as also new saw and grist mills and other manufacturing establishments in our midst, and many more we have learned would have been put up but for the scarcity of skilled mechanics and labourers and the high rate of wages of both these classes; these there can be no doubt have had the effect of curtailing various projected improvements, such as draining, building, &c.

We consider it a matter of great importance to our farming community to see various manufacturing establishments springing up so rapidly around them, and which they should hail with gladness, as they give employment to a class of consumers who require many descriptions of farm produce that may not be found profitable to export.

Since our last report a woollen factory has been erected and is now in operation in Lindsay, and although not on an extensive scale, is an acquisition to our County.

Our county town, it is clear, is rapidly growing, and must become more and more an advantageous market for our surplus productions. The great pork-packing establishment of C. L. Baker, Esq., is proving a boon of no ordinary kind, and should be a spur to every farmer to provide himself with the best breed of hogs and plenty of them. The coarse earthenware factory established, adjoining the town, is, we understand, being well sustained, and its wares found good and useful. We find there is a good opening in or about Lindsay for the manufacturing of drain tiles. The new branch bank recently opened will prove another acquisition; and we also understand that a joint stock company is about being organized for erecting a furniture factory on a large scale. This, when brought into operation, will give employment to a large class of consumers. Then there is a still greater and more important scheme for the farmers located between Lindsay and Bobcaygeon, viz., the projected railway from Bowmanville to Bobcaygeon, by way of Lindsay, and which rests principally with the people of Bowmanville, we understand, to bring the project to a favourable climax, and which, we are led to believe, they will do, if at all in their power.

Should we get this increased railroad accommodation in addition to our present railway from Port Hope to Beaverton, our farmers both in the east and west of the County would reap the benefit of railway transport, and these, together with the freight and travelling facilities they have at present both north and south of Lindsay by the nine or ten steamers which ply daily in the summer between Lindsay and Fenelon Falls, Bobcaygeon and Bridgenorth on one side, and Port Perry and intermediate places on the opposite side, they would find themselves as highly favoured in this respect as they could almost desire.

Emily.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			34	66		
“ 53 Members’ Subscriptions.....			53	00		
“ Admissions to Show			34	47		
“ Legislative Grant			72	00		
					194	13
CR.						
By Prizes for Live Stock.....	68	75				
“ “ Field Products.....	18	75				
“ “ Dairy “	4	00				
“ “ Horticultural Products.....	6	25				
“ “ Agricultural Implements.....	14	00				
“ “ Arts and Manufactures.....	23	75				
			135	50		
“ Preparing Show Grounds.....			7	40		
“ Working Expenses.....			23	22		
					166	12
Balance in hand.....					28	01

NOTE.—The Society has experienced some falling off in the number of members, but an increased interest was manifested at the Fall Show, which comprised 281 entries, but little short of previous years.

Mariposa.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			40	14		
“ 87 Members’ Subscriptions.....			88	00		
“ Admissions to Show.....			14	90		
“ Legislative Grant.....			110	00		
					253	04
CR.						
By Prizes for Live Stock.....	98	50				
“ “ Field Products.....	16	00				
“ “ Dairy “	3	50				
“ “ Horticultural Products.....	3	15				

	\$ cts.	\$ cts.	\$ cts.
By Prizes for Agricultural Implements	6 00		
" " Arts and Manufactures	33 00		
	—	160 15	
" Preparing Show Grounds.....		2 38	
" Working Expenses, (two years,).....		67 25	
		—	229 78
Balance in hand			23 26

NOTE:—The Society appears to be improving ; the number of entries at the Fall Show was 395.

Verulam.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		28 12	
" 63 Members' Subscriptions.. ..		66 00	
" Admissions to Show.....		9 01	
" Legislative Grant.....		122 00	
" Proceeds Sale of Seeds and Plaster		35 45	
" Miscellaneous Receipts.....		4 50	
		—	265 08

CR.			
By Prizes for Live Stock.....	52 25		
" " Field Products.....	15 25		
" " Dairy "	4 75		
" " Horticultural Products.....	5 50		
" " Agricultural Implements.....	3 00		
" " Arts and Manufactures.....	11 50		
	—	92 25	
" Freight of Plaster.....		26 70	
" Purchase of Seed and Plaster		52 77	
" Agricultural Publications.....		7 50	
" Working Expenses.....		14 27	
		—	192 79
Balance in hand.....			72 29

Lindsay Horticultural Society.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		110 21	
" 61 Members' Subscriptions.....		62 00	
" Admissions to Show.....		41 70	
" Legislative Grant.....		81 00	
		—	295 91

CR.			
By Premiums.....	117 30		
" Deposited in Bank.....	108 00		
" Rent and Working Expenses.....	60 88		
	—	286 18	
Balance in hand			9 73

REPORT.

The Directors of the Lindsay Horticultural Society, in presenting their fourth annual report of its proceedings, find that they have to congratulate the members on its continued success, notwithstanding that the display of flowers at the last Autumn show was not so good as at some of the previous exhibitions, although we are convinced that it was not for lack of

year, the amount of prizes paid was considerably greater. The deficiency in the harvest affected the show of cereals; but, taking the exhibition as a whole, it was rather superior to any former year, and with more exertion on the part of officials, and greater interest on the part of the agricultural class, this Society would become second to none in the Province.

Wellesley.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		48 51	
" Members' Subscriptions.....		188 00	
" Admissions to Show.....		9 45	
" Legislative Grant.....		140 00	
" Municipal Grant		40 00	
		<u>425 96</u>	
CR.			
By Prizes for Live Stock.....	170 00		
" " Field Products.....	44 25		
" " Dairy	15 00		
" " Horticultural Products.....	13 25		
" " Agricultural Implements.....	24 50		
" " Arts and Manufactures.....	23 00		
	<u>290 00</u>		
" Working Expenses.....		75 00	
		<u>365 00</u>	
Balance in hand.....			60 96

Woolwich.

CR.			
To Balance in hand		64 90	
" 64 Members' Subscriptions		125 50	
" Legislative Grant.....		140 00	
" Municipal Grant.....		20 00	
		<u>350 40</u>	
CR.			
By Prizes for Live Stock.....	112 50		
" " Field Products.....	54 00		
" " Dairy	19 25		
" " Horticultural Products	9 00		
" " Agricultural Implements	4 00		
" " Arts and Manufactures.....	26 00		
	<u>224 75</u>		
By Prize of previous year		1 60	
" Working Expenses		47 98	
		<u>273 73</u>	
Balance in hand.....			76 67

WATERLOO, SOUTH.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		470 94	
" 275 Members' Subscriptions.....		279 00	
" Admissions to Show.....		281 84	
" Legislative Grant		700 00	
" Municipal		260 00	
" Miscellaneous Receipts		4 00	
		<u>1995 78</u>	

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock	624	50				
" " Field Products	75	50				
" " Dairy	34	50				
" " Horticultural Products	43	25				
" " Agricultural Implements	86	00				
" " Arts and Manufactures	90	25				
			954	00		
" L. G. to Township Societies			140	00		
" Preparing Show Grounds			131	49		
" Grant to Fat Cattle Show			30	00		
" Working Expenses			278	59		
					1534	08
Balance in hand					461	70

REPORT.

The year 1870, with some drawbacks, has upon the whole been rather a favourable season in South Waterloo, and although in the early part of it about one-half of the Fall Wheat was killed by ice, what was left was of excellent quality. Young Clover was also much killed out (a thing of very rare occurrence) by the same cause. But a growing season went far to supply the deficiency, and an unprecedentedly open fall leaves the hay stacks fuller than usual at this season of the year. Barley, especially where late sown, is not an average crop. Two weeks of more than ordinary hot weather while filling lessened the size, and catching weather while cutting injured the colour. Spring Wheat is very poor, but there is so little grown in this neighbourhood that farmers will not feel the loss, and have thus escaped the crushing calamity which has befallen the counties in the north and west, by the blighting of their staple crop, Spring Wheat. Peas, where late sown, were somewhat injured by mill-dew, but as a whole, perhaps, there was an average crop. Oats, where early sown were an average crop. Where late, or grown on wet land, inferior both in quantity and quality. Corn is so little sown that it is not worth noticing, and your Directors are proud to say that we have few buckwheat farmers in South Waterloo. Potatoes were an average crop, but as usual in moist seasons, some of the fine varieties suffered from rot, more especially the Peach Blows, while the Garnets, Calicoes, Harrisons and some other coarser kinds entirely escaped. Turnips are a very unequal crop. Where good they are very good, and where bad they are very bad. A number of causes led to this result. Drought retarded the brairding of such as were a little late in sowing, while after brairding deluges of rain washed hilly land, and flooded the low. Carrots are an average crop, but not so extensively grown as formerly. Perhaps the additional labour they require more than turnips has led to this result.

Your Directors are happy to note the increase of cheese making in the Riding, and the prosperous condition of our cheese factories—one of our factories, Mr. McBean's, having taking the first prize at the Provincial Exhibition. Also the increased and increasing desire for thorough-bred animals among farmers generally, and their greater attention to the raising and fattening of stock, not only profitable in the meantime, but leading to a better system of husbandry and to the laying aside of that deteriorating practice, still too prevalent, of summer fallowing and too exclusive wheat cropping.

Wilmot.

DR.	\$	cts.	\$	cts.	\$	cts.
To 261 Members' Subscriptions			267	00		
" Admissions to Show			74	36		
" Legislative Grant			140	00		
" Municipal Grant			20	00		
" From Blandford Agricultural Society			200	00		
" Miscellaneous Receipts			59	00		
					760	36

C.R.		
By Prizes for Live Stock.....	258 50	
“ “ Field Products.....	41 50	
“ “ Dairy “.....	28 75	
“ “ Horticultural Products.....	25 75	
“ “ Agricultural Implements.....	55 00	
“ “ Arts and Manufactures.....	56 00	
“ “ Ploughing Match.....	26 00	
	<hr/>	
	491 50	
Unpaid.....	24 75	
	<hr/>	
	466 75	
“ Preparing Show Grounds.....	11 65	
“ Working Expenses.....	90 50	
	<hr/>	
		568 90
		<hr/>
Balance in hand.....		191 46

WELLAND.

D.R.		\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....			23 14	
“ Members' Subscriptions.....			177 00	
“ Admissions to Show.....			222 75	
“ Legislative Grant.....			700 00	
“ J. C. Rykert for Special Prizes.....			10 00	
“ Corporation of Welland.....			25 00	
“ Cheque on County Treasurer.....			200 00	
“ Miscellaneous Receipts.....			34 00	
			<hr/>	
				1391 89
C.R.				
By Prizes for Live Stock.....	433 50			
“ “ Field Products.....	44 25			
“ “ Dairy “.....	7 50			
“ “ Horticultural Products.....	11 00			
“ “ Agricultural Implements.....	11 00			
“ “ Arts and Manufactures.....	97 94			
	<hr/>			
			605 29	
“ Prizes of previous year.....			28 75	
“ L. G. to Township Societies.....			420 00	
“ Preparing Show Grounds.....			35 26	
“ Building House on Show Grounds.....			300 00	
Discount on Silver.....			11 12	
“ Working Expenses.....			110 96	
			<hr/>	
				1511 38
				<hr/>
Balance in hand.....				119 40

REPORT.

*

*

*

*

In regard to the horse department of the late Exhibition it was considered a marked success, both as regards numbers and condition; and great interest appeared to be taken by the spectators in viewing the proportion of the various animals, their action and speed over the course.

In regard to thorough-bred cattle, there was as usual an entire confinement to Durhams, the other classes being wholly unrepresented, showing that we are getting behind some other Counties in this respect; but it is to be hoped that the farming community will arise from

their lethargy and see it clearly to be their interest to pay more attention to the improvement of their cattle, so that in future the various classes will be well represented. The sheep in particular made an excellent display, and were the theme of general admiration, reflecting great credit on their owners for the skill and assiduity displayed in bringing them up to their present standard of excellence. The entries in regard to swine were rather limited, but of those there were some specimens of porcine beauty.

There was a very fine display of apples, both in regard to numbers and size, but the other fruits were almost an entire failure, which was a great drawback to the appearance of the Hall. Roots were good and abundant. Grain (wheat excepted) was generally inferior to that of former years, owing to the excessive drought of the early part of the summer. The ladies, as usual, did very much to render the Show interesting and attractive, which exceeded anything ever shown in this department, in this County.

*

*

*

Bertie.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			17	04		
“ 64 Members’ Subscriptions			85	00		
“ Legislative Grant.....			80	11		
					182	15
CR.						
By Prizes for Live Stock	102	45				
“ “ Field Products	14	20				
“ “ Dairy “	1	80				
“ “ Horticultural Products.....	10	77				
“ “ Arts and Manufactures	12	05				
			141	27		
“ Working Expenses.....			18	44		
					159	71
Balance in hand.....					22	44

Crowland.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			10	73		
“ Members’ Subscriptions			51	00		
“ Legislative Grant.....			48	00		
					109	73
CR.						
By Prizes for Live Stock.....	50	76				
“ “ Field Products.....	15	17				
“ “ Dairy “	2	99				
“ “ Horticultural Products.....	2	22				
“ “ Arts and Manufactures.....	12	04				
			83	18		
“ Working Expenses			19	90		
					103	08
Balance in hand.....					6	65

Humberstone.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			23	12		
“ 62 Members’ Subscription.....			62	00		
“ Legislative Grant.....			58	36		
					143	48

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock.....	54	10				
“ “ Field Products.....	16	14				
“ “ Dairy “.....	3	75				
“ “ Horticultural Products.....	4	44				
“ “ Agricultural Implements.....	19	62				
“ “ Arts and Manufactures.....	13	79				
			111	84		
“ Working Expenses.....			23	38		
					135	22
Balance in hand.....					8	26

Stamford.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			9	73		
“ 103 Members' Subscriptions.....			105	00		
“ Legislative Grant.....			94	12		
					208	85
CR.						
By Prizes for Live Stock.....	187	25				
“ “ Field Products.....	15	05				
“ “ Dairy “.....	3	75				
“ “ Horticultural Products.....	6	70				
“ “ Agricultural Implements.....	1	50				
“ “ Arts and Manufactures.....	22	30				
			236	55		
“ Working Expenses.....			22	70		
					259	25
Balance due Treasurer.....					50	40

Thorold.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			30	51		
“ Members' Subscriptions.....			91	50		
“ Legislative Grant.....			85	56		
“ Miscellaneous Receipts.....			1	84		
					209	41
CR.						
By Prizes for Live Stock.....	151	00				
“ “ Field Products.....	18	82				
“ “ Dairy “.....	1	25				
“ “ Horticultural Products.....	3	01				
“ “ Agricultural Implements.....	3	50				
“ Arts and Manufactures.....	10	09				
			187	67		
“ Working Expenses.....			22	41		
					210	08
Balance due Treasurer.....					67	

Willoughby.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			8	75		
“ “ Members' Subscriptions.....			57	00		
“ Legislative Grant.....			53	65		
					119	40

CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock	51	12				
“ “ Field Products	16	25				
“ “ Dairy “		75				
“ “ Horticultural Products	3	48				
“ “ Agricultural Implements	1	00				
“ “ Arts and Manufactures	6	61				
	79	21				
Unpaid	1	75				
			77	46		
“ Working Expenses			21	16		
					98	62
Balance in hand					20	78

WELLINGTON, NORTH.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			9	32		
“ 187 Members' Subscriptions.....			193	50		
“ Admissions to Show.....			5	85		
“ Legislative Grant.....			700	00		
“ Municipal Grant.....			100	00		
“ Miscellaneous Receipts.....			46	50		
					1055	17
CR.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock.....	162	50				
“ “ Field Products, (including Seed Fair).....	105	00				
“ “ Dairy “	32	50				
“ “ Agricultural Implements.....	48	00				
“ Arts and Manufactures.....	34	00				
			382	00		
“ Prizes of previous year.....			18	50		
“ L. G. to Township Societies.....			332	26		
“ Preparing Show Grounds.....			31	50		
“ Agricultural Publications.....			9	00		
“ Working Expenses (including liabilities for 1869,).....			275	36		
					1048	62
Balance in hand.....					6	55

NOTE.—The Arthur Society united with that of the County for exhibition purposes.

REPORT.

* * * * *

The Society's Seed Fair was held at Harriston on the 17th day of February last, under the management of a Committee of five Directors; the day was rather stormy, although not very cold. There were not many entries, which may be accounted for by the state of the weather and the circumstance of the side roads being blocked up; but, although there was not much grain entered for competition, yet there were several waggon loads on the street exposed for sale.

The grain shown at the seed fair was generally but of very moderate quality, the barley was very good and the peas very fair, but the rest of the grain shown was but very moderate, indeed, especially the wheat, some of which was not considered by the judges worthy of a prize.

The various animals, samples and articles shown were, in general, very good, especially sheep and pigs. The grain was not so good as we have previously seen. The roots were splendid, especially the potatoes. The dairy produce was largely represented, and as usual, the judges had great difficulty in awarding the premiums. The domestic manufactures and ladies' work were numerous and all good of their kind, showing great credit to the good wives and daughters in the riding. In the mechanical department, the articles shown were not numerous, but were good of their kind.

As to the crops throughout the Riding, the past season has been, to a great extent, a failure; the fall wheat was very much damaged by being winter killed, and will not average more than 15 bushels to the acre; spring wheat is still worse, being almost entirely—in some sections of the riding—destroyed by blight; it is the poorest crop that we have seen for years, and it is utterly impossible to strike an average, as in some cases, the seed, even, has not been returned. Barley was a moderate crop, but the price has been low. Peas and oats were good crops but the late oats, though they have turned out well in quantity, are very light in weight. Potatoes were the best crop that has been for many years, but the rot in some sections got hold of the older kinds, such as pink eyes, kidneys and cups, and did a deal of damage. Turnips and other root crops were excellent, above an average, although fears were freely expressed that the drought in the end of June and beginning of July, would hurt them.

Amaranth.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		34 73	
“ Members’ Subscriptions.....		73 00	
“ Admissions to Show		13 30	
“ Legislative Grant.....		96 85	
		————	217 88
CR.			
By Prizes for Live Stock.....	69 00		
“ “ Field Products.....	46 00		
“ “ Dairy “	5 00		
“ “ Horticultural Products.....	10 75		
“ “ Agricultural Implements.....	4 00		
“ “ Arts and Manufactures.....	28 00		
	————	162 75	
“ Preparing Show Grounds		8 00	
“ Working Expenses.....		26 50	
		————	197 25
Balance in hand			20 63

Minto.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		73 10	
“ 31 Members’ Subscriptions.....		131 00	
“ Admissions to Show		44 50	
“ Legislative Grant.....		140 00	
“ Municipal Grant		80 00	
		————	
“ Miscellaneous.....		72 00	
		————	540 60
CR.			
By Prizes for Live Stock.....	113 50		
“ Field Products.....	43 00		
“ “ Dairy “	15 00		
“ “ Horticultural Products.....	14 00		
“ “ Agricultural Implements.....	19 50		
“ “ Arts and Manufactures.....	28 12		
	————	233 12	

	\$	cts.	\$	cts.	\$	cts.
By Preparing Show Grounds.....			22	00		
" Purchase of Show Grounds.....			130	00		
" Working Expenses			54	14		
					439	26
Balance in hand.....					101	34

Peel and Maryborough.

Dr.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			31	68		
" Members' Subscriptions.....			74	00		
" Admissions to Show.....			10	00		
" Legislative Grant.....			187	41		
" Municipal Grant.....			20	00		
					323	09

Cr.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock	121	50				
" " Field Products.....	18	25				
" " Dairy	4	50				
" " Horticultural Products.....	1	00				
" " Agricultural Implements.....	7	00				
" " Arts and Manufactures	6	25				
	158	50				
Unpaid.....	27	50				
					131	00
" Prizes of previous year.....			24	75		
" County Society			92	00		
" Working Expenses.....			50	61		
					298	36
Balance in hand.....					24	73

WELLINGTON, CENTRE.

Dr.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			193	60		
" 139 Members' Subscriptions			146	50		
" Admissions to Show			38	17		
" Legislative Grant.....			700	00		
" Municipal Grant (County).....			100	00		
" Nichol Society.....			40	00		
" Miscellaneous Receipts			7	00		
					1225	27

Cr.	\$	cts.	\$	cts.	\$	cts.
By Prizes for Live Stock.....	301	50				
" " Field Products.....	109	00				
" " Dairy	36	00				
" " Horticultural Products.....	9	00				
" " Mechanics' and Manufacturers' Departments.....	44	00				
" " Arts and Manufactures.....	55	50				
" " Ploughing Match.....	39	00				
	594	00				
Unpaid.....	60	50				
					533	50

	\$	cts.	\$	cts.	\$	cts.
By Prizes of Previous year			50	00		
“ L. G. to Township Societies.....			384	96		
“ Preparing Show Grounds.....			15	80		
“ Working Expenses			144	97		
					1129	23
Balance in hand					96	04

REPORT.

* * * * *

The Exhibition was held in the Village of Fergus, on the 29th and 30th days of September, and although there was not as much competition in some of the departments as could have been wished, it was in many respects the best ever held in Riding. The weather, however, was most unpropitious, especially the second day. This, no doubt, prevented many exhibitors and visitors from attending, and materially reduced the receipts at the door of the Show Room.

Last summer an early harvest proved unusually wet. The Hay crop was above an average, but great difficulty was experienced in saving it in good condition. Very little Fall Wheat is now cultivated within the limits of the Society, the crop being generally more or less winter killed. On fields, however, where the crop came well through the winter, the grain was good, and the yield corresponding. Spring wheat has been for several years the main crop; but, unfortunately, the average yield has been annually decreasing, and last year, in consequence of the wet season, or some other cause, this crop was generally struck with a peculiar kind of blight, leaving some fields scarcely worth the trouble of harvesting, and reducing the yield throughout the Riding much below an average. Oats were also somewhat below an average crop. Barley and Peas did very well, the latter above an average. Potatoes yielded well, but the old varieties are now very subject to rot. Turnips turned out well, and our leading agriculturists are wisely paying more attention to breeding and fattening Live Stock and depending less on grain.

So little interest was taken in the Ploughing Match in 1869 that last year your Directors had resolved to discontinue it, for at least one season. A. D. Ferrier, Esq., M. P. P. presented the Society, however, with two very handsome silver medals, to be competed for annually by the ploughmen and ploughboys of the Riding he represents, and it was then deemed proper to offer certain money prizes for competition along with the medals. The match came off in the Township of Pilkington, and although the turn out was not as large as has been witnessed in former years, much interest was taken in the competition, and the work was considered the finest ever executed in the Riding. A ploughman from the Township of Garafraxa carried off the one medal, and a ploughboy from Eramosa the other.

* * *

Eramosa.

To Balance in hand.....	21	93		
“ Members' Subscriptions	139	75		
“ Legislative Grant.....	61	81		
CR.			223	49
By Prizes for Life Stock.....	78	00		
“ “ Field Products.....	23	50		
“ “ Dairy “	13	50		
“ “ Horticultural Products	10	50		
“ “ Arts and Manufactures.....	17	50		
“ “ Ploughing Match.....	22	00		
			165	00
“ Working Expenses.....		21	58	
			186	58
Balance in hand.....				36 91

REPORT.

It is again our duty to lay before you the proceedings of your Society for the past year, and we can refer with pleasure to the fact that there was certainly a little more animation amongst the members and exhibitors, and the weather being favourable on the day of the show, more excitement was felt outside.

* * * *

The Annual Ploughing Match was held in a field of Mr. John Peters, on the 19th of October. Seven ploughs competed, and the work proved that there was no going back in this branch of agriculture.

In the month of December, your Directors received a communication from the South Riding Agricultural Society, which has taken the initiative for holding in the Town of Guelph, in 1871, a Central Show, asking us, in conjunction with others, for the hand of fellowship in their undertaking. The Town Council of Guelph has most liberally responded to the call, and the feeling that the time had come for this productive County to exhibit, within its own borders, all its excellent capabilities, appears to be so universal that we did not hesitate to forward a memorial to the County Council at its last sitting, praying that liberal assistance be granted for the purpose, being convinced that there was no one, whether engaged in agriculture or otherwise, in the Township, but would feel that we had the good name of Eramosa in our hands, and that we were called upon to make some exertion to lend a helping hand in this great undertaking, which would not only reflect, by its success, honour on the County of Wellington, but would, by our proximity to the County Town, not leave us behind in a commercial phase of the matter.

The undertaking is not altogether a venture, having already been tried in the Counties of York and Middlesex, and proved a most unequivocal success in a pecuniary point, besides creating a more favorable market for produce, and it would hardly be consistent on the part of Wellington, to say she could not show as much enterprise as the before named counties, after the large number of premiums which fall to her share at the Annual Provincial Exhibitions.

Erin.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		139 90	
" 210 Members' Subscriptions.		210 00	
" Admissions to Show		224 00	
" Legislative Grant		124 74	
" Miscellaneous Receipts.....		3 00	
		—	701 64
Cr.			
By Prizes for Live Stock.....	235 00		
" " Field Products.....	74 00		
" " Dairy "	21 60		
" " Horticultural Products.....	20 00		
" " Agricultural Implements.....	28 00		
" " Arts and Manufactures.....	58 65		
" " Ploughing Match.....	42 00		
		—	479 25
" Preparing Show Grounds.....		5 15	
" Working Expenses.....		113 77	
		—	598 17
Balance in hand.....			103 47

Garafraea, East.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		9 63	
" Members' Subscriptions,.....		124 90	
" Admissions to Show.....		21 40	

	\$	cts.	\$	cts.	\$	cts.
To Legislative Grant.....			66	98		
					222	01
CR.						
By Prizes for Live Stock.....	143	25				
“ “ Field Products.....	38	50				
“ “ Dairy “.....	8	75				
“ “ Horticultural Products.....	4	00				
“ “ Agricultural Implements.....	11	50				
“ “ Arts and Manufactures.....	20	75				
	226	75				
Unpaid.....	55	25				
			171	50		
“ Working Expenses.....			25	46		
					196	96
Balance in hand.....					25	05

REPORT.

The Directors of East Garafraxa Agricultural Society, in presenting this their (second) Annual Report, congratulate the members on the very flourishing condition of the Society during the past year. The Society's Fall Exhibition of 1870 was held in Marsville, on Friday 21st day of October. The number of entries was very large, amounting altogether to 562, being 73 more than last year. The articles exhibited were of excellent quality, with the exception of cattle, and even in that class there was a marked improvement from last year. The specimens of fruit, roots and grain, were considered by visitors to be equal to those on exhibition, at the fall shows this year, of many of the older and wealthier Societies in the County. In the ladies' department the specimens were also very superior.

Your Directors would still advise that greater attention be paid to the raising of thorough bred stock in order to make the show more successful.

Garafraxa West.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand.....			17	27		
“ Members' Subscriptions.....			97	40		
“ Legislative Grant.....			48	50		
					163	17
CR.						
By Prizes for Live Stock.....	80	50				
“ “ Field Products.....	21	50				
“ “ Dairy “.....	8	50				
“ “ Horticultural Products.....	3	50				
“ “ Agricultural Implements.....	5	00				
“ “ Arts and Manufactures.....	18	50				
			137	50		
“ Working Expenses.....			27	63		
					165	13
Balance in hand.....					1	96

Nichol.

	\$	cts.	\$	cts.	\$	cts.
DR.						
To Balance in hand.....			3	50		
“ 56 Members' Subscriptions.....			56	00		
					59	50

CR.	\$	cts.	\$	cts.	\$	cts.
By Amount paid Centre Riding Society.....			40	00		
" Working Expenses.....			14	78		
			—	—	54	78
Balance in hand.....					4	72

NOTE:—The Society united with that of Centre Wellington, for exhibition purposes.

Pilkington

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			15	27		
" 136 Members' Subscriptions.....			140	00		
" Legislative Grant.....			82	15		
			—	—	237	42
CR.						
By Prizes for Live Stock.....	100	00				
" " Field Products.....	35	50				
" " Dairy "	10	50				
" " Horticultural Products.....	2	50				
" " Agricultural Implements.....	6	00				
" Arts and Manufactures.....	5	50				
	—	—	160	00		
" Working Expenses.....			40	22		
			—	—	200	22
Balance in hand.....					37	20

WELLINGTON, SOUTH.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand			226	41		
" Members' Subscriptions.....			167	50		
" Admissions to Show.....			133	42		
" Legislative Grant			700	00		
" Municipal Grant.....			100	00		
" From Guelph Township Society.....			213	00		
" Special Prizes.....			55	00		
			—	—	1595	33
CR.						
By Prizes for Live Stock	532	00				
" " Field Products	86	50				
" " Dairy "	26	00				
" " Horticultural Products.....	33	75				
" " Agricultural Implements	53	00				
" " Arts and Manufactures.....	34	50				
" " Growing Crops.....	35	00				
" " Ploughing Match.....	38	00				
	—	—	838	75		
" L. G. to Township Societies.....			136	17		
" Horticultural Society.....			133	50		
" Working Expenses.....			214	97		
			—	—	1323	39
Balance in hand.....					271	94

REPORT.

The Directors of the South Wellington and Guelph Township Agricultural Societies, in making their annual report, have much pleasure in being able to congratulate the members of the joint Societies upon the success that has attended their efforts for the past year. The different shows, ploughing and turnip matches testify to the improvement made.

The Easter fat cattle show was held on the 6th of April. The number of entries slightly exceeded those of 1869, but the quality of stock exhibited was never excelled in this County. Your Directors are satisfied that the holding of your fat cattle shows has been the means of inducing the buyers from the cities, both in the Dominion and in the United States, to attend the market, knowing that they can get (especially at those seasons of the year in which our shows are held), a superior class of beef for the Christmas and Easter holidays than they can procure in any other part of the Dominion. The fact of so many buyers attending the market creates a lively competition, which always acts beneficially for the farmers.

The Societies held a stallion show on the 14th of April. There were 15 horses on exhibition; conspicuous among them were two imported ones, owned by Mr. C. J. Buckland, of Guelph, each of which took a first prize in their respective classes, although at that time they had scarcely got over their very rough passage across the Atlantic. Since then they have greatly improved, and we can safely say we have two as good horses in the County as there are in Canada, and we hope our farmers will avail themselves of the opportunity to improve their stock of horses.

The Annual Exhibition was held on the 12th and 13th of October, and in the number of entries, quality of articles and animals shown, was far superior to the show of 1869.

The show of horses was far superior both as regards numbers and style of animals to any previous exhibition. There were 25 entries of brood mares, and certainly a better lot we have seldom or ever seen in this country. Young horses of all classes were well represented, and gave evidence of great improvement. The number of horses of all classes amounted to 139, being more than double that of last year. We want our farmers to see that it will be to their benefit to breed a good class of heavy team horses, not only to enable them to work their land better and deeper, for we maintain that the time has come when deep cultivation must be the rule, and not the exception, to enable the farmer to keep up the fertility of the soil, and no one can plough deep who has not a strong team to do it with. There is another reason that ought to induce the farmers to breed heavier horses than they have been in the habit of rearing, and that is, they will sell for far more money: we see instances of this every day in our market, if a farmer comes in with a load of grain and has a good, heavy horse, some one is sure to ask him if he wants to sell; if so, he can always command a large price.

There was an excess of nearly 50 entries in the number of cattle entered for competition, and we may safely say that as to quality they were quite up to the high standard of excellence for which the cattle in this County are famed; all classes were well represented, Durhams, Herefords, Galloways, Devons and Grades, among the latter were some very fine animals, indeed it would puzzle many judges to distinguish between the thoroughbred and Grade, were they shown together.

The show of sheep was, as regards numbers about the same as last year, being 100 entries, but the animals themselves were superior, and some late importations of Cotswold and Leicester rams were exceedingly fine, and will tend to keep up the breed of sheep in this locality.

In hogs the show far exceeded any previous one, there being more than double the number of entries, and the quality far superior to any we have seen for years. The improved Berkshires seem to be the favourites, and during the last few months a good business was done with the American buyers who came over to purchase for breeding purposes, and paid large prices for the best bred animals. The Essex holds a high place in the estimation of some breeders as a small breed of hog, and they claim for them the advantage of coming to early maturity and aptitude to fatten.

In grain and seeds there was a larger and better display than we have seen for the last year or two, and the quality, especially of wheat, was very good, both of the Diehl and Treadwell varieties of fall, and the Fife spring wheat.

The show of roots and fruit exhibited in 1869 was considered to be one of the best ever held here, but we can confidently assert the exhibition of these products this year far surpassed

it, both as to quantity and quality. Such a collection of roots, turnips, mangolds, carrots and potatoes could scarcely be excelled in any part of the country, and shows to what perfection our farmers have arrived at in the cultivation of them. The show of apples was a credit to the horticulturists and farmers of the County; nearly 150 samples were shown, and of first class fruit. This looks as if they were paying more attention to fruit cultivation than formerly, and we feel sure that it will ultimately be a very remunerative investment to plant orchards with the best varieties. In making choice of the sorts best adapted for this section of the country, we think the Fruit Growers' Association has done good service, as by a careful perusal of their annual report, it will be seen that practical men from every section of the Province have reported on what varieties are best suited to their localities.

The entries of dairy produce were about the same as last year, but the quality of the butter was not so good.

There was not that richness we are accustomed to find in butter brought in for exhibition. This is attributed to the peculiar weather we had during those months that are considered the best for butter making. Another cause that must have some effect on the cows, was that about that time they were tormented with flies, and, from the stings of these pests, their legs became quite raw and much swollen, which at first caused some alarm, many believing that a new disease had broken out among the cattle.

The Christmas fat cattle show took place on the 13th of December, and was decidedly the largest ever held here, there were nearly one hundred entries of fat stock, most of them were of the very best quality. In sheep and pigs the show was unusually large, and the quality of both, excellent.

The poultry, too, far exceeded any that we have seen before, being double the quantity and of most excellent quality, most of it being purchased at high figures and sent to different cities in the Dominion.

Messrs. C. & A. Sharpe gave their Annual gift of \$20, for the best four acres of turnips, to which the Society added \$15, to be awarded to the second and third best fields. Twelve farmers competed for these prizes. The successful competitors were—1st. Patrick McQuillen the average of whose crop was 1,458 bushels per acre; F. W. Stone gained the second prize, his crop averaging 1,128 bushels; and Wm. Hamilton carried off the third prize, his field averaging 1,048 bushels per acre. Several other fields gave an average of from 900 to 1000 bushels.

* * * *

Guelph.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		13 39	
“ Members' Subscriptions		193 00	
“ Canada Company's Donation		20 00	
		226 30	
Cr.			
“ Working Expenses		1 00	
“ Treasurer S. Wellington Society		213 00	
		214 00	
			12 30

NOTE.—This Society united with that of the South Electoral Division, for holding a Fall Exhibition.

Paslinch.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		116 35	
“ 174 Members' Subscriptions		180 00	
“ Legislative Grant		136 17	
“ Special Prize		10 00	
		442 52	
By Prizes for Live Stock	145 00		
“ “ Field Products	44 00		

	\$	cts.	\$	cts.	\$	cts.
By Prizes for Dairy Products	18	00				
“ “ Horticultural Products.....	11	50				
“ “ Agricultural Implements	8	00				
“ “ Arts and Manufactures	19	00				
“ “ Ploughing Match.....	21	00				
	266 50					
“ Working Expenses.....			82	53		
					349	03
Balance in hand.....					93	49

NOTE.—From the facts stated in the Report, this Society is in a very efficient state of usefulness, and doing much to improve the agriculture of the Township.

Guelph Horticultural Society.

	\$	cts.	\$	cts.	\$	cts.
Dr.						
To Balance in hand.	45	83				
“ Members' Subscriptions	154	00				
“ Admissions to Show.....	77	90				
“ Legislative Grant.....	133	50				
					411	23
Cr.						
By Amount of Premiums	287	25				
“ Working Expenses.....	109	56				
					396	81
Balance in hand					14	42

REPORT.

The display at the Spring Show was good, and quite equal to any previous one at that season, both as to quality and number of entries made. We are glad to see a much better display of window plants than has been shown before, and hope that many more having fine plants may be induced to become members and exhibit them. Fuschias were very good, and have attracted a large share of attention. Geraniums, also were fine, and a much larger number of plants were on exhibition. We hope to see this class of plants more generally cultivated, as nothing adds so much to the appearance of our gardens as a fine selection of these showy flowers.

There was an excellent display of cut flowers and bouquets, and where all were first rate quality it is useless to particularise, so we shall leave this part of the Report, and pass on to the fruit and vegetables. The former, as usual, at that time of the year, consisted of strawberries, gooseberries, cherries, and currants, all of which were fine, and a large number of entries were made in different classes. There was a much larger display of cherries than we have ever seen before, and we are glad to see this fine fruit brought more into cultivation, and were it not for the destruction caused by the birds, this would be a profitable crop to raise for market, but at present it is very hard to save even a dish for our own table.

The show of vegetables was excellent, and comprised all that are generally seen at that time of the year.

Special notice ought to be made of the display of early potatoes, which were larger than we have seen before. The same may be said of French beans and cucumbers, for they were far better than usual.

We think it right to append the Report of gentlemen, who acted as judges upon this occasion.

“The judges have pleasure in congratulating the Directors on the splendid appearance of the exhibition. There are many things that deserve notice, especially fuschias, green-house and window plants, which were very fine; also a very handsome floral ornament, and a fine dis-

play of cut flowers; also fruit and vegetables, which were excellent. Altogether, the exhibition is a great success, and is most admirably arranged."

The fall show took place on the 13th of September, and, as usual at this season, we had an excellent display, the entries were far in excess of last year, and every department well represented. The display of pot plants was fine, but cut flowers were not as good as we have seen, owing to the season being two weeks' earlier than usual; consequently, some of the annuals were off at the time of the exhibition.

* * *

The show of fruit, on the contrary, was never better, especially apples, there being 195 entries in the different classes, and all the samples were of the best description. There was also a good competition in pears, and some fine specimens were shown, comprising the Bartlett, Flemish Beauty and many of the best varieties grown.

In hardy grapes also, there was an increased display, and all samples were well ripened, which was not the case last year, owing to the cold temperature and early frosts. The Delaware seems to be the best adapted for this part of the country, and is a very fine flavoured grape, and of easy culture. Next comes the Hartford, Prolific, Concord and Isabella the two former excellent, the latter not so much to be depended upon, although a very fine grape.

The display of vegetables was large and excellent, with the exception of cauliflowers, which were almost a total failure, and detracted much from the interest in that part of the Show, as we generally have a keen competition in that vegetable. All other classes were well represented.

The following are the remarks made by the judges on the conclusion of their labours:—

"The display of apples we considered, especially fine; pears, though limited in variety, were very fine: Flemish Beauty and Easter Beurre especially. Plums a very good collection. Hardy grapes ripened up splendid. Delewares, Hartfords, Isabellas, Concord and some other varieties being especially good. Among vegetables and roots, such as Carrots, Parsnips, Beets, &c., the show was very fine, and we expect they will make their mark at the Provincial Exhibition. The window plants were very creditable for the season, and some varieties were well worthy of being more generally cultivated. Fuchias, tolerable for the time of the year; pansies fine; stocks and asters not very great in variety; coxcombs very good; annuals good. Some very fine varieties of Drummond's Phlox; hand bouquets rather large. Taking it altogether the Show was an excellent one."

WENTWORTH, NORTH.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		84 56	
" Members' Subscriptions		110 95	
" Legislative Grant.....		700 00	
" Municipal Grant		100 00	
" From Wentworth and Hamilton Societies.....		189 21	
		<hr/>	1184 72
Cr.			
" L. G. to Township Societies.....		391 03	
" Treasurer of Wentworth and Hamilton Societies		540 00	
" Agricultural Publications.....		47 50	
" Working Expenses.....		34 47	
		<hr/>	1013 00
		<hr/>	<hr/>
Balance in hand.....			171 72

NOTE:—This Society united with those of South Wentworth and Hamilton for a fall exhibition, the report of which will be found under that of Wentworth and Hamilton joint Societies.

Beverley.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			23	39		
" Members' Subscriptions.....			147	00		
" Legislative Grant.....			113	58		
" Municipal Grant			25	00		
					308	97
CR.						
By Prizes for Live Stock.....	133	00				
" " Field Products	31	75				
" " Dairy "	10	50				
" " Horticultural Products.....	3	50				
" " Agricultural Implements.....	13	00				
" " Arts and Manufactures.....	21	00				
" " Ploughing Match.....	19	00				
			231	75		
" " of previous year.....			1	50		
" Preparing Show Grounds			3	47		
" Working Expenses			46	84		
					283	56
Balance in hand.....					25	41

Flamboro' East.

DR.	\$	cts.	\$	cts.	\$	cts.
To 133 Members' Subscriptions.....			182	00		
" Admissions to Show.....			15	00		
" Legislative Grant.....			140	00		
" Municipal Grant			50	00		
					393	00
CR.						
By Balance due Treasurer.....			1	36		
" Prizes for Live Stock	189	50				
" " Field Products.....	57	50				
" " Dairy Products.....	16	00				
" " Horticultural Products	15	50				
" " Agricultural Implements.....	5	00				
" " Arts and Manufactures.....	23	50				
			307	00		
" " Preparing Show Grounds.....			48	77		
					357	13
Balance in hand.....					35	87

Flamboro', West.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....			55	01		
" 145 Members' Subscriptions.....			158	00		
" Admissions to Show.....			71	95		
" Legislative Grant.....			137	45		
" Municipal Grant.....			40	00		
" Miscellaneous Receipts.....			2	50		
					464	91
CR.						
By Prizes for Live Stock.....	150	75				
" " Field Products.....	62	25				
" " Dairy "	12	75				
" " Horticultural Products	23	00				

" " Agricultural Implements	17 00	
" " Arts and Manufactures	37 25	
	-----	303 00
" Preparing Show Grounds.....		19 00
" Working Expenses.....		79 03

		401 03
Balance in hand.....		63 88

WENTWORTH, SOUTH.

DR.	cts.	\$ cts.	\$ cts.
To Balance in hand.....		38 90	
" 104 Members' Subscriptions.....		153 25	
" Legislative Grant.....		700 00	
" Municipal Grant.....		100 00	
" Proportion of Balance from Wentworth and Hamilton Societies.....		192 73	
		-----	1184 88
CR.			
By L. G. Township Societies.....		383 45	
" Paid Treasurer Wentworth and Hamilton Societies.....		550 00	
" Agricultural Publications.....		67 45	
" Working Expenses.....		56 63	
		-----	1057 53
Balance in hand.....			127 35

NOTE.—North and South Wentworth and Hamilton Societies united for a Fall show.
[See subjoined report.]

REPORT.

The Board of Directors, in submitting this their fourteenth annual report, beg to congratulate the members on the continued success of the Society. In January last your Board amalgamated with the Agricultural Societies of North Wentworth and the City of Hamilton, for the purpose of holding an exhibition, which, we are happy to say, was eminently successful.

Ninety-seven of the members were supplied with the *Canada* and *Ontario Farmer*.

N. AND S. WENTWORTH AND HAMILTON.

(\$ Union Exhibition.)

DR.	\$ cts.	\$ cts.	\$ cts.
To 57 Members' Subscriptions		84 00	
" Admissions to Show.....		702 20	
" Grant from Hamilton Society.....		550 00	
" " North Wentworth "		540 00	
" " South " "		550 00	
" Rents of stands, &c.....		75 00	
		-----	2501 20
CR.			
By Prizes for Live Stock	835 00		
" " Field Products	117 00		
" " Dairy "	52 00		

	\$ cts.	\$ cts.	\$ cts.
By Prizes for Horticultural Products	138 50		
" " Agricultural Implements.....	63 50		
" " Arts and Manufactures.....	174 75		
	<u>1381 25</u>		
" Preparing Show Grounds.....	103 00		
" Proportion of balance Hamilton Society ..	192 73		
" " " South Wentworth Society.....	192 73		
" " " North Wentworth "	189 21		
" Working Expenses.....	442 28		
		<u>2501 20</u>	

Ancaster.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		56 61	
" 135 Members' Subscriptions		148 50	
" Admissions to Show.....		26 20	
" Legislative Grant		130 50	
" Municipal Grant.....		50 00	
" Miscellaneous Receipts.....		16 00	
		<u>427 81</u>	

Cr.			
By Prizes for Live Stock	166 75		
" " Field Products	40 75		
" " Dairy "	26 50		
" " Horticultural Products.....	34 00		
" " Agricultural Implements.....	12 50		
" " Arts and Manufactures	25 50		
	<u>306 00</u>		
" Preparing Show Grounds.....	3 75		
" Working Expenses... ..	57 54		
		<u>367 29</u>	
Balance in hand.....			<u>60 52</u>

Barton and Glanferd.

Dr.	\$ cts.	\$ cts.	cts.
To Balance in hand		45 39	
" 117 Members' Subscriptions ..		127 50	
" Admissions to Show.....		13 00	
" Legislative Grant.....		112 95	
" Municipal Grant.....		50 00	
		<u>348 84</u>	

Cr.			
By Prizes for Live Stock.....	171 50		
" " Field Products.....	31 50		
" " Dairy "	8 25		
" " Horticultural Products.....	22 00		
" " Agricultural Implements.....	5 00		
" " Arts and Manufactures.....	17 75		
	<u>250 00</u>		
" Working Expenses.....	18 66		
		<u>304 66</u>	
Balance in hand.....			<u>44 18</u>

Saltfleet and Binbrook

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		63 60	
" 171 Members' Subscriptions.....		174 00	
" Legislative Grant.....		140 00	
" Municipal Grants.....		45 00	
CR.			422 60
By Prizes for Live Stock.....	196 50		
" " Field Products.....	56 25		
" " Dairy ".....	13 00		
" " Horticultural Products.....	20 75		
" " Agricultural Implements.....	13 00		
" " Arts and Manufactures.....	38 75		
		338 25	
" Working Expenses		61 88	
			400 13
Balance in hand.....			22 47

YORK, NORTH.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		116 57	
" Members' Subscriptions.....		358 00	
" Admissions to Show.....		411 95	
" Legislative Grant.....		700 00	
" Municipal Grant.....		150 00	
" Donations.....		77 00	
" Miscellaneous Receipts.....		60 50	
			1874 02
CR.			
By Prizes for Live Stock.....	400 75		
" " Field Products.....	128 00		
" " Dairy ".....	71 50		
" " Horticultural Products.....	56 50		
" " Agricultural Implements.....	85 50		
" " Arts and Manufactures.....	88 00		
" " Extras	31 13		
		861 38	
" L. G. to Township Societies.....		374 34	
" Paid on Exhibition Buildings, &c.....		270 71	
" Working Expenses.....		138 70	
			1645 13
Balance in hand.....			228 89

REPORT.

In submitting the annual Report for the past year, your Directors have pleasure in being able to congratulate the Society on its continued prosperity.

The Fall Exhibition of the Association, held in September last, was very successful; but, owing to a change in the time of holding the Provincial Fair, the early date of the show somewhat militated against it; another reason may, perhaps, be found in the fact of the Provincial Exhibition being held in Toronto during the past season. There is no room for discouragement, however, for the entries in stock, etc., as a whole, quite equalled the former year. Altogether there were 1461 entries in the various classes—the decrease, as compared

with last year, being chiefly in the floral hall department of the exhibition. It is a question that your Board would respectfully submit for the consideration of their successors—whether or no, more encouragement ought not to be given to articles of competition usually exhibited in the agricultural hall, by way of attracting non-members, who afterwards may thereby be induced to join the Association.

The financial condition of the Society, herewith submitted, as audited by your Auditors, shows a healthy condition; and a continuance of the same zeal and interest hitherto manifested will fully realize the anticipations of previous Boards, in the wisdom of purchasing the land upon which the Association has erected so excellent and capacious an Agricultural Hall—perhaps unequalled in the Province by any Electoral or County Society. Visitors from various parts of Ontario, who have examined it, commend the spirit which prompted the enterprise in the highest terms.

From the Township reports received, your Board observes nothing of special interest to notice. The branch organizations all appear to be in a flourishing condition. The Societies of King and Whitechurch held a very successful Union Show at Aurora, during the past year, which seems to indicate that friends of Agriculture are becoming convinced of the importance of more centralization, fewer shows and better ones, with more extended competition and larger premiums.

*

*

*

The special prizes donated by the friends of the Society, for competition, your Board acknowledges with gratitude. They not only stimulate competitors, but add *éclat* to the exhibition itself, and thereby induce a large attendance of visitors.

Georgina and N. Gwillimbury.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		78 62	
“ 86 Members' Subscriptions		86 00	
“ Admissions to Show		6 00	
“ Legislative Grant.....		68 89	
“ Miscellaneous Receipts		1 50	
		-----	241 01
CR.			
By Prizes for Live Stock	74 50		
“ “ Field Products	30 75		
“ “ Dairy “	10 25		
“ “ Horticultural Products	11 25		
“ “ Agricultural Implements.....	19 50		
“ “ Arts and Manufactures	10 25		
	-----	155 50	
“ Working Expenses		22 35	
		-----	177 85
Balance in hand.....			63 16

NOTE.—The Directors think that this exhibition was not in advance of previous ones, and that the interest in the progress of the Society is not felt as it ought.

Gwillimbury, East.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		19 02	
“ 116 Members' Subscriptions		116 00	
“ Legislative Grant.....		95 45	
“ Miscellaneous Receipts.....		2 50	
		-----	223 97
CR.			
By Prizes for Live Stock	86 00		
“ “ Field Products	32 00		
“ “ Dairy “	6 00		

"	"	Horticultural Products	7	25	
"	"	Agricultural Implements	5	00	
"	"	Arts and Manufactures	15	00	
			151	25	
		Unpaid	4	00	
				147	25
"		Working Expenses	42	74	
					189 99
		Balance in hand			33 98

REPORT.

The exhibitions for the past three years have been confined to residents of the Township, and the general opinion, based upon that experience, is, that the mutual competition thus encouraged is producing a more marked improvement in stock than formerly.

No special interest is taken as yet in the importation of seeds, as the results in individual cases have not given the expected return. In roots, potatoes, in particular, the results of new introductions have given more general satisfaction. The yield of all cereals quite below an average, owing to Spring wheat and peas being injured by drought in the early part of the season, and late oats by rust; potatoes a full average, but turnips not, owing to dry weather and rot.

King.

DR.		\$	cts.	\$	cts.	\$	cts.
To	Balance in hand			145	93		
"	Division of funds of Whitechurch and King Societies			83	50		
"	Donation, Patterson & Brothers			4	00		
						233	43
CR.							
By	Working Expenses			8	00		
							8 00
	Balance in hand					225	43

NOTE:—This Society united with Whitechurch for a fall show, particulars of which will be found in a subjoined report.

Whitechurch.

DR.		\$	cts.	\$	cts.	\$	cts.
To	Balance in hand			153	08		
"	Proceeds of union show with King			83	51		
						236	59
CR.							
By	Prizes for previous year			12	50		
"	Working Expenses			0	51		
						13	01
	Balance in hand					223	58

REPORT.

The Directors of the Whitechurch Agricultural Society respectfully report, that in obedience to a resolution passed at the last annual meeting, they met the Directors of the King Township Society and formed a union for a fall show to be held in Aurora, on the following basis: to sell union tickets, and each Society to share equally in profit or loss.

The Directors have much pleasure in reporting that perfect harmony existed in the working of the two Societies; that notwithstanding the unfavourableness of the weather the

show was a success; that the profits derived from entrance to show ground, booths, &c., amounted to nearly \$250; and that in consequence of the unfavourable weather a number of prizes were not competed for, consequently a comparatively large amount was left on the treasurer's hands to be divided between the two Societies.

The Directors do not feel that they would be doing Aurora justice without acknowledging the many kind favours and contributions for extra prizes from the villagers, amounting to about \$130.

Your Directors do not think it advisable to make a lengthy report of the several productions of the soil, but are happy to say that there has been a bountiful yield of fruit and vegetables, and that the cereals are fully an average crop with other years.

King and Whitchurch.

(Union Show.)

Dr.	\$ cts.	\$ cts.	\$ cts.
To 344 Members' Subscriptions		344 00	
" Admissions to Show		229 40	
" Legislative Grant.....		300 00	
" Proceeds of Refreshment Booths, &c.		32 10	
		-----	905 50
Cr.			
By Prizes for Live Stock	330 50		
" " Field Products.....	78 25		
" " Dairy "	15 00		
" " Horticultural Products	23 00		
" " Agricultural Implements.....	58 50		
" " Arts and Manufactures	58 50		
" " Extra Prizes... ..	46 50		
		-----	610 25
" Paid King proportion of surplus		83 50	
" " Whitchurch "		83 51	
" Working Expenses.....		128 24	
		-----	905 50

YORK, EAST.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		386 31	
" Members' Subscriptions		288 00	
" Admission to Show.....		679 70	
" Legislative Grant		700 00	
" Municipal Grant		125 00	
" From Markham on Account of Union.....		442 21	
" Donations, &c.....		246 00	
		-----	2867 22
Cr.			
By Prizes for Live Stock	1031 00		
" " Field Products.....	66 00		
" " Dairy "	86 50		
" " Horticultural Products.....	41 00		
" " Agricultural Implements.....	94 00		
" " Arts and Manufactures.....	214 50		
" " Ploughing Match.. ..	161 00		
		-----	1694 00

	\$ cts.	\$ cts.	\$ cts.
By Prizes of Previous Years.....		121 50	
“ L. G. to Township Societies.....		412 50	
“ Preparing Show Grounds.....		54 50	
“ Working Expenses.....		380 36	
		<u>2662 86</u>	
Balance in hand.....			204 36

REPORT.

* * *

In February your Directors united with those of Markham Agricultural Society for the year; each Society to give its entire funds raised during the year, to defray the expenses of the united Society, and any loss or profit to be borne or divided equally by each Society.

In May, the united Board held a Ploughing Match and Spring Fair near Thornhill, the residents of that village contributing handsomely the sum of \$101.00, towards paying prizes. Although the Board offered large prizes, your Directors regret to report that the Ploughing Match and Spring Fair were not as successful as in former years.

In October the united Fall Fair was held as usual at the Society's grounds, Markham Village, and was very successful, the number of entries of animals being greater than last year.

The show of grain, roots, vegetables, implements, manufactures, and ladies' work, fully exceeding former years. * * *

Markham.

	\$ cts.	\$ cts.	\$ cts.
DR.			
To Balance in hand		519 59	
“ Members' Subscriptions		166 00	
“ Legislative Grant		140 00	
“ Municipal Grant		25 00	
		<u>850 59</u>	
CR.			
By Union with E. York Society ..		442 21	
“ Working Expenses		12 25	
		<u>454 46</u>	
Balance in hand			396 13

NOTE.—This Society united with the East Riding for Exhibition purposes.

Scarboro'.

	\$ cts.	\$ cts.	\$ cts.
DR.			
To Balance in hand		45 51	
“ 151 Members' Subscriptions.....		182 00	
“ Admissions to Show		58 50	
“ Legislative Grant.....		140 00	
“ Municipal Grant.....		25 00	
“ Proceeds Sale of Lumber... ..		47 00	
		<u>498 01</u>	
CR.			
By Prizes for Live Stock	202 00		
“ “ Field Products	39 00		
“ “ Dairy “	12 50		
“ “ Horticultural Products	21 50		
“ “ Agricultural Implements	15 00		
“ “ Arts and Manufactures.....	58 00		
		<u>348 00</u>	

	\$	cts.	\$	cts.	\$	cts.
By Preparing Show Grounds				62	72	
“ Working Expenses				48	10	
						458 82
Balance in hand						39 19

YORK, WEST.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand.....				115	04	
“ 130 Members' Subscriptions				142	50	
“ Admissions to Show.....				90	62	
“ Legislative Grant.....				700	00	
“ Municipal Grant.....				125	00	
“ Amount repaid by City Electoral Society, 1868				60	20	
“ Subscription of York and Vaughan to Spring Show				60	00	
						1293 36
CR.						
By Prizes for Stallions at Spring Show		114		00		
“ “ Bulls “ “		69		00		
					183	00
“ L. G. Township Societies					412	50
“ Subscription to Union Show					497	27
“ Working Expenses					88	50
						1181 27
Balance in hand						112 09

REPORT.

The West York Riding Society held a Spring Show on the 28th April, in the village of Weston. Over \$200 were offered in prizes for stallions and bulls; the township of Vaughan and York united with the Riding and paid the sum of \$30 each to the funds of the Riding Society, thereby entitling them to the privileges of membership.

The show was a decided success; there were a number of imported horses exhibited in the different classes,—horses that would have done credit at any exhibition in Ontario.

The Society formed a union with Vaughan township for a Fall Exhibition, which was held in the village of Woodbridge, in October last, and was a decided success; the exhibition was honoured by a visit from the Hon. the Provincial Treasurer, who expressed himself much pleased with the quantity and quality of Agricultural produce, animals, and manufactured articles exhibited.

For particulars of prizes awarded, see Report from Vaughan township.

Etobicoke.

DR.	\$	cts.	\$	cts.	\$	cts.
To Balance on hand.....				57	32	
To Members' Subscriptions.....				124	00	
“ Admissions to Show.....				31	25	
“ Legislative Grant.....				165	00	
“ Municipal Grant.....				60	00	
“ Miscellaneous Receipts				8	50	
						446 07
CR.						
By Prizes for Live Stock.....		115		00		
“ “ Field Products.....		42		25		
“ “ Dairy “		12		25		

	\$ cts.	\$ cts.	\$ cts.
By Prizes for Horticultural Products.....	12 00		
" " Agricultural Implements.....	23 00		
" " Arts and Manufactures.....	55 25		
	259 75		
Unpaid.....	2 50		
		257 25	
" Preparing Show Grounds, tents, &c.....		20 00	
" Working Expenses		95 05	
			372 30
Balance in hand			73 77

Vaughan.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		655 41	
" Members' Subscriptions.....		443 65	
" Admissions to Show		274 86	
" Legislative Grant		140 00	
" Municipal Grants.....		75 00	
" Amount from County Society.....		281 00	
			1869 92
Cr.			
By Prizes for Live Stock.....	548 50		
" " Field Products.....	61 00		
" " Dairy	51 00		
" " Horticultural Products.....	17 00		
" " Agricultural Implements.....	60 00		
" " Arts and Manufactures	118 50		
" " Ploughing Match.....	167 00		
	1023 00		
Unpaid.....	96 50		
		926 50	
" Preparing Show Grounds.....		35 36	
" Cash to Spring County Fair.....		30 00	
" Agricultural Publications.....		26 00	
" Working Expenses.....		150 66	
			1168 52
Balance in hand.....			701 40

REPORT.

The Agricultural productions of the township during the past year have, on the whole been very fair, so far as yield is concerned. From the continued growth for a number of years of midge proof wheat, that noxious insect has been pretty nearly exterminated, and in consequence the Soules wheat is again being sown in considerable breadth,—the yield from it this year being very favourable. Other descriptions of fall wheat have also produced a fair average. Barley and oats have been a full average, yielding especially well when sown early. Peas have not turned out as well as the appearance of the crop when on the ground would have indicated. From the dripping character of the season, there is an abundance of straw of all kinds. Hay, too, for the same reason has been a good crop. Pasture was exceedingly plentiful, the season commencing very early on account of the welcome absence of our usual late spring frosts. The root crop has been only moderate, potatoes especially, when planted on heavy land, being much affected by rot. As regards stock, there have been no changes of im-

portance, further, than importations of several very fine draught horses, by Mr. Robert Ferris, of Richmond Hill, and the introduction of several first class sheep.

York.

DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand.....		119 80	
“ 60 Members’ Subscriptions.....		79 00	
“ Legislative Grant		140 00	
“ Municipal Grant.....		25 00	
“ From Union Exhibition of 1870.....		60 25	
		<hr/>	424 05
CR.			
By West Riding Society for Spring Exhibition.....		30 00	
“ Amount paid for members to Provincial Exhibition.....		45 00	
“ Working Expenses.....		24 75	
		<hr/>	99 75
Balance in hand.....			<hr/> 324 30

NOTE.—The Society held no Show in the Fall, in consequence of the Provincial Exhibition taking place in Toronto. In the Spring, the Society united with the West Riding for a show of stallions and bulls, held at Weston, which was a success. The Directors state that the Society continues steadily to improve.

APPENDIX TO REPORT

TO THE

Commissioner of Agriculture and Arts.

APPENDIX (B).

REPORT OF THE AGRICULTURAL AND ARTS ASSOCIATION.

*To the Hon. John Carling,
Commissioner of Agriculture, &c.,
for the Province of Ontario.*

SIR,—The Council of the Agricultural and Arts Association, beg leave to submit, in accordance with Statute, a condensed report of their proceedings for the past year, 1870.

The Council as constituted for the year 1869 met once in the beginning of the past year, viz., on the 11th January. At this meeting, sundry matters occupied the attention of the Council, viz: Steps were taken with a view to the settlement of the Arbitration matter with the Toronto University; arrangements were made with the Entomological Society in reference to the grant of \$400 made them, and the Report and Cabinet to be furnished by them; a settlement was effected of the claim of Mr. Glackmeyer, for entertaining Prince Arthur at London in 1869, by paying him \$1,000 in full of all demands; the Treasurer's accounts for the previous year, with the report of the Auditors thereupon, were submitted and adopted, and several other matters connected with the business of the year 1869 were submitted and disposed of.

The Council as constituted for the year 1870 consisted of the following members, viz:—

ELECTIVE MEMBERS.—Messrs. George McDonald, Cornwall; Hon. J. Skead, Ottawa; Andrew Wilson, Maitland; James J. Farley Belleville; John Walton, Peterboro'; George Graham, Brampton; James Cowan, Galt; J. C. Rykert, St. Catharines; Hon. David Christie, Paris; Robt. Gibbons, Goderich; Lionel E. Shipley, Falkirk; Stephen White, Charing Cross.

EX-OFFICIO MEMBERS.—Hon. John Carling, Commissioner of Agriculture; Dr. Beatty, Cobourg, President of the Mechanics' Institutes Association; Professor Buckland, Agricultural Chair, Toronto University; Rev. Dr. Ryerson, Chief Superintendent of Education for Ontario, Rev. R. Burnett, President of the Fruit Growers' Association.

The Council met at Toronto on the 23rd February, and organized by appointing Hon. D. Christie President, Hon. J. Skead, Vice-President, and re-appointing Mr. Graham as Treasurer. At this meeting it was resolved to memorialize the Government at Ottawa for a remission of duty on animals of improved breeds imported from abroad for the purpose of improving the breeds of the country, a request which was subsequently assented to by the Dominion Government, to the manifest advantage of the public. An Executive Committee was appointed for the ensuing year; a Committee was appointed to confer with the city authorities in reference to the accommodation for the approaching Exhibition at Toronto; it

was decided to call for tenders for the printing of the Council for the ensuing year, as had been done with advantage in 1869; the Treasurer was required to renew his bond for the same amount as the previous year, viz: \$20,000; a Committee was appointed to attend to the progress of the suit in Chancery against the late Treasurer; the ensuing Exhibition was appointed to take place during the week commencing 3rd October; steps were taken to establish an interchange of valuable grains and seeds with the Department of Agriculture at Washington, and various other matters of more or less importance were attended to.

The Council met again at Toronto on May 12th. The thanks of the Association were voted to Mr. James Young, M.P., for his valuable services in Parliament in supporting the Memorial of the Council and obtaining a remission of the duties on cattle imported from abroad, for breeding purposes. The Treasurer's bond of himself and four sureties was submitted and accepted; reports were received as to the progress of the suit in Chancery against the late Treasurer, and of the Arbitration case with the University; conferences were held with the city authorities in reference to the Exhibition buildings, from which it appeared that satisfactory accommodation would be provided; the prize list for the ensuing Exhibition was revised in detail, and changes made where they were deemed to be advisable; the tenders for printing were examined and the contract awarded; and it was decided to print a catalogue of the animals and implements which should be entered for the ensuing Exhibition.

A meeting of the Executive Committee took place at Toronto on May 19th. The Committee conferred with the City Council in reference to the Exhibition buildings. The Secretary was instructed to write to England for information in reference to obtaining a set of Registering Turnstiles for the admission gates to the Exhibition.

The Council met on July 6th at Toronto. A considerable amount of business was done in reference to the Exhibition, and steps taken in reference to the Denison Chancery Suit; it was decided to order immediately from England, through Messrs. Rice Lewis & Son, of Toronto, four of Norton's Self-Registering Turnstiles at \$140 each, to be delivered in September, in time for the Exhibition; a resolution was passed instructing the Treasurer to make such arrangements with the Bank of British North America, that the Association should receive interest on current deposits, or else to transfer the accounts to another bank; sundry accounts were submitted and passed, and other matters disposed of.

A meeting of the Executive Committee was held at Toronto on September 7th. Interviews were held with the City authorities, and with the Local Committee in reference to the preparations for the Exhibition; numerous matters of detail were attended to, and a special Committee was appointed to make further arrangements. It appeared that the City authorities had made very liberal arrangements for the accommodation of the Exhibition, but a considerable amount of work not yet provided for remained to be done. The Committee agreed to provide for the execution of a portion of the work under their orders, and also to recommend the Council to place the sum of six hundred dollars at the disposal of the City authorities to aid in the completion of the buildings and grounds.

The Council met at the Exhibition grounds on October 3rd, and every day subsequently during the week of the Exhibition. Owing to the very wet weather at the beginning of the week, and the consequent bad state of the ground, it was found necessary to incur some expense in making temporary provision to render the cattle and sheep pens fit for occupation by the animals, and to render access to the different parts of the ground practicable to visitors. These and the many other details connected with the management of the Exhibition, the award of prizes, &c., engaged the attention of the Council throughout the week.

The annual meeting of the Directors of the Association was held on the Thursday evening, at which it was decided that the next Provincial Exhibition should be held at the City of Kingston. In connection with this meeting it appeared that many of the credentials presented by delegates were of an informal and unsatisfactory character, and a Committee was subsequently appointed by the Council to investigate such credentials. Dr. Beatty, of Cobourg, having ceased to be a member of the Council, in consequence of retiring from the position of President of the Mechanics' Institutes Association, the Council expressed by resolution the high sense they entertained of the invaluable services which that gentleman had for so many years rendered to the agricultural, manufacturing and artistic interests of the Province. Professor Buckland was authorized to make arrangements for obtaining illustrations for the report of the Entomological Society. It was decided that the publication of the trans-

actions of the Association should be resumed, commencing from the last volume, and embodying any reports received bearing upon the agricultural interests of the Association.

The Council met again on December 7th. The settlement of accounts connected with the business of the year occupied the attention of the members for some time. It was resolved that the publication of the transactions should be proceeded with, and the Secretary was instructed to advertize for tenders for the printing. The Committee on credentials appointed at the last meeting submitted their report, and the Secretary was instructed to request all the Societies and Institutes to furnish their delegates to the annual meeting with proper credentials, a requirement which has since been rendered imperative by an amendment of the Statute by the Legislature of Ontario. A Committee was appointed to close the arbitration matter with the University at the earliest date practicable. The Treasurer and Secretary were instructed to have the detailed statement of Receipts and Expenditure printed and distributed in time for the annual meeting of the County Societies. The Secretary was instructed to call for entries for the second volume of the Short Horn Herd Book, to be published as early as practicable the ensuing season.

In this brief sketch of proceedings the Council has referred only to subjects of some considerable general interest and importance, leaving those of minor consequence to appear in their proper place in the transactions of the Association, to be hereafter published.

THE EXHIBITION.

The Council have great pleasure in reporting that the Provincial Exhibition of 1870 was in every respect a complete success. Although held at a somewhat later period of the year than usual, and though the peculiar character of the season affected the number of the entries in a few of the classes, yet the total number of entries fell but little short of the number at any of the most successful of the exhibitions of previous years; and the amount actually awarded in prizes was greater than on any previous occasion, except at Hamilton in 1860, the year of the visit of the Prince of Wales, when an unusually large prize list was offered. In the character and good quality of the animals and articles exhibited, particularly in the more important classes, the Exhibition of 1870 may safely be pronounced to have been in advance of any of its predecessors, and not far behind the most distinguished displays of the kind in any other country.

In the show of horses there was a slight falling off in the total number of entries as compared with the previous year, principally owing to the exclusion of animals entered merely for the purpose of driving or riding about the grounds. A number of the entries in the class of Blood Horses also, failed to make their appearance in time, reducing the show in this class to very small proportions. But in the classes of Roadster and Carriage, Agricultural and Heavy Draught Horses, the display was excellent, reflecting much credit upon the spirit and enterprise of the importers and breeders of this most useful and important animal. In the Heavy Draught classes particularly, some late importations of valuable animals were much admired for their valuable qualities, offering to the Province encouraging prospects of improvement in this breed in future.

In the different classes of cattle, the Exhibition afforded the most imposing display of valuable animals which has ever been seen in this Province, or, perhaps it may safely be said, on this continent, affording the most satisfactory proof, if that were required, of the suitability of the climate and soil of Ontario for the profitable breeding and rearing of the most valuable descriptions of live stock. In the class of Short Horns, which perhaps few will dispute to be the most important of all, an unusually large number of recently imported valuable animals made their appearance, and obtained the general admiration of good judges for their superior merit. The enterprising importers of such valuable animals deserve the grateful thanks of the country, and this Council trusts that they will meet with a substantial reward in the profitable results of their expenditure and labour. In Ayrshires also, a large number of newly imported animals made their appearance, adding more than usual attractions to this class, so distinguished for useful qualities for the dairy.

In the class of Sheep there was a falling off in the total number of entries as compared with the previous years, which falling off occurred altogether in the class of Leicesters, a fact not difficult to account for; and the show of sheep upon the ground was greatly diminished at the opening of the Exhibition by the unfortunate state of the weather; but in the quality

of the animals exhibited the display was quite equal, if not superior, to any of its predecessors. In the class of Cotswolds there was a considerable increase in the number of animals exhibited over former years, and in this and the other classes of sheep, the leading breeders of the Province exhibited recent importations of great value and beauty, bringing up this department of the Exhibition to a very high standard.

In the classes of Swine the number of entries compared favourably with former years, and the superior character of the animals on exhibition indicated a greatly increased amount of attention being bestowed upon the improvement of this class of animals, and afforded just grounds for the expectation of profitable returns in future to the pork packing interests of the country.

In the classes of Agricultural Implements and machinery there was an excellent and varied display of useful articles, giving satisfactory evidence of an increased demand for improved appliances for cultivating the soil, and preparing the produce for consumption.

In the classes of grain, field roots, and fruits, the Exhibition afforded the best evidence that could be desired of the adaptability of the soil and climate of Ontario for the production of these necessities and luxuries of life, and of the steady advance in the care and skill which are bestowed upon their culture.

The Council do not deem it necessary to refer at greater length on this occasion to the other departments of the Exhibition. They content themselves with repeating that the Exhibition, on the whole, was a most gratifying success, and afforded to the careful observer the most satisfactory proof of the steady advance in the material interests and prosperity of the country. The attendance of visitors was larger than at any previous Exhibition in the Province, an opportunity for healthy amusement and instruction being thus afforded to a larger number of individuals at one time than on any other occasion during the year. The registering turnstiles imported from England for the purpose of checking frauds in the admission of visitors proved satisfactory in their working, but unfortunately the number of them imported proved inadequate to give the system a complete trial.

The Council submit herewith (Table A), a statement showing the amount offered in prizes in each class, the number of entries made, and the amount actually awarded. They also submit (Table B), a comparative table showing the number of entries and the amount of prizes awarded at each Exhibition from 1846 to 1870, inclusive. They further exhibit a statement (Table C), showing the number and amount of prizes awarded in each general class or group of classes to each County in the Province. This statement will be found interesting as showing, to a certain extent, the proportion in which each County contributes to the filling up of the various classes and in return derives benefit from the results of the Exhibition. In examining this statement, of course, it must be borne in mind that proximity to the seat of the Exhibition for the time being, must influence very materially the extent to which each County can be expected to contribute towards the general display. But after making all due allowance on this ground, it will be seen that the analysis affords a tolerably correct index of the degree of progress and improvement which each County has made in the various branches of agricultural and industrial productions, and exhibits in a distinct shape the peculiar products in which several of the Counties have obtained for themselves a just pre-eminence. This statement also indicates plainly, the Council conceive, the advantages derived from holding the Exhibition alternately in different parts of the Province, as opposed to a stationary system; the best products of the agricultural and mechanical skill of the country being thereby carried to, and diffused over, first one section of the country and then another. This consideration, perhaps, leads to the inquiry whether the Exhibition may not with propriety and advantage to the public interests be carried at some not remote day, so soon as the necessary facilities for doing so shall have come into existence, to entirely new districts which have not yet received their due share of the benefit and instruction to be derived from it. The statement referred to, on being condensed into the smallest compass, exhibits the following results:

TOTAL Number and Amount of Prizes awarded in each County.

Counties.	Number of Prizes.	Amount.
		\$ cts.
Addington.....	2	6 00
Brant.....	45	299 00
Bruce.....		
Carleton.....	2	32 00
Dundas.....	8	249 00
Durham.....	89	799 50
Elgin.....	3	28 00
Essex.....	3	32 00
Frontenac.....	9	39 50
Glengarry.....		
Grenville.....	4	8 00
Grey.....	5	38 00
Haldimand.....	5	85 00
Halton.....	38	224 00
Hastings.....	16	167 00
Huron.....	22	133 50
Kent.....	1	4 00
Lambton.....	3	13 00
Lanark.....	1	15 00
Leeds.....	3	11 00
Lennox.....	11	72 00
Lincoln.....	119	442 00
Middlesex.....	62	326 00
Norfolk.....		
Northumberland.....	57	242 50
Ontario.....	107	1,118 50
Oxford.....	33	118 50
Peel.....	65	725 50
Perth.....	23	126 00
Peterborough.....	8	39 50
Prescott.....		
Prince Edward.....	8	93 00
Renfrew.....		
Russell.....		
Simcoe.....	21	253 00
Stormont.....	3	16 00
Victoria.....	2	3 00
Waterloo.....	52	367 00
Welland.....	19	108 50
Wellington.....	172	1,471 00
Wentworth.....	137	744 50
York.....	634	3,434 50
Other localities not in Ontario.....	64	359 00
Total.....	1856	12,243 50

(A.)

STATEMENT showing the Amount offered in Premiums in each Class, the Number of Entries, and the Amount actually Awarded :

Classes.	Amount offered.	Number of entries.	Amount awarded.
	\$ cts.		\$ cts.
1 Blood Horses.....	297 00	26	298 00
2 Road and Carriage Horses.....	493 00	219	494 00
3 Agricultural Horses.....	340 00	137	340 00
4 Heavy Draught Horses.....	339 00	89	385 00
5 Durham Cattle.....	521 00	188	613 00
6 Devon Cattle.....	433 00	71	383 00
7 Herefords.....	433 00	27	227 00
8 Ayrshires.....	433 00	127	529 00
9 Galloways.....	433 00	52	336 00
10 Grade Cattle.....	178 00	41	178 00
11 Fat and Working Cattle.....	230 00	38	185 00
12 Cotswold Sheep.....	252 00	155	346 00
13 Prince of Wales' Prize, Flock of Leicesters.....	60 00	6	60 00
14 Leicesters.....	252 00	167	328 00
15 Southdowns.....	156 00	61	156 00
16 Shropshire, &c., Downs.....	128 00	16	98 00
17 Merinos.....	156 00	61	156 00
18 Fat Sheep.....	80 00	25	60 00
19 Pigs, Large Breeds.....	126 00	33	126 00
20 Suffolks.....	126 00	50	126 00
21 Improved Berkshires.....	126 00	74	192 00
22 Essex Pigs.....	126 00	26	117 00
23 Other Small Breeds.....	126 00	26	117 00
24 Poultry.....	258 00	267	204 00
25 Implements, Large.....	1037 00	262	788 00
26 Implements, Hand.....	302 00	165	221 00
27 Grains, Hops, &c.....	483 00	325	478 00
28 Small Field Seeds, Flax, &c.....	191 00	74	108 00
29 Field Roots.....	167 00	344	152 00
30 Fruit, Professional.....	234 00	98	166 00
31 Fruit, General List.....	412 00	814	365 00
32 Garden Vegetables.....	144 50	450	143 00
33 Plants and Flowers.....	201 00	118	131 50
34 Dairy Products.....	249 00	144	220 00
35 Miscellaneous.....		12	
36 Cabinet Ware.....	220 00	79	217 00
37 Carriages, Sleighs, &c.....	262 00	112	211 00
38 Chemical Manufactures.....	78 00	31	32 00
39 Drawings, Engravings, &c.....	288 00	86	204 00
40 Fine Arts, in Oil, &c.....	434 00	170	359 00
41 Fine Arts, in Water Colours.....	370 00	245	300 00
42 Groceries and Provisions.....	145 00	47	98 00
43 Ladies' Work.....	117 50	282	132 50
44 Ladies' Work.....	93 50	160	94 00
45 Machinery, Castings, &c.....	489 00	150	587 00
46 Sewing Machines, &c.....	84 00	51	84 00
47 Metal Work, Miscellaneous.....	360 00	230	322 00
48 Musical Instruments.....	201 00	37	132 00
49 Natural History.....	124 00	28	101 00
50 Paper, Printing, &c.....	98 00	56	73 00
51 Saddlery, Leather, &c.....	266 00	90	194 00
52 Shoe and Boot Work, &c.....	176 00	82	86 00
53 Woollen, Flax, and Cotton Goods, &c.....	412 00	183	280 00
Total.....	13,740 50	6,897	12,243 00

(B.)

STATEMENT showing the Amount offered in Prizes, the Number of Entries, and the Amount Awarded at each Provincial Exhibition from 1846 to 1870. inclusive :

Place and Year.	Total amount offered in Prizes.	Total No. of entries.	Total amount awarded.
	\$ cts.		\$ cts.
Toronto, 1846.....	1,600 00	1,150	1,100 00
Hamilton, 1847.....	3,000 00	1,600	2,400 00
Cobourg, 1848.....	3,100 00	1,500	2,300 00
Kingston, 1849.....	5,600 00	1,429	2,800 00
Niagara, 1850.....	5,106 00	1,638	3,400 00
Brockville, 1851.....	5,017 85	1,466	3,223 75
Toronto, 1852.....	5,916 95	3,048	4,913 00
Hamilton, 1853.....	6,410 15	2,820	5,293 25
London, 1854.....	7,176 10	2,933	5,427 50
Cobourg 1855.....	9,216 30	3,077	6,941 70
Kingston, 1856.....	9,238 50	3,791	6,799 50
Brantford, 1857.....	10,071 40	4,337	8,186 00
Toronto, 1858.....	10,700 50	5,572	9,215 00
Kingston 1859.....	10,513 00	4,830	8,067 50
Hamilton, 1860.....	15,015 50	7,532	12,940 00
London, 1861.....	12,031 00	6,242	10,188 50
Toronto, 1862.....	12,036 50	6,319	10,722 00
Kingston, 1863.....	11,866 00	4,756	9,166 00
Hamilton, 1864.....	12,559 50	6,392	10,304 25
London, 1865.....	13,434 00	7,221	11,036 75
Toronto, 1866.....	12,712 00	6,279	10,288 50
Kingston, 1867.....	12,731 00	4,825	9,311 50
Hamilton, 1868.....	13,304 50	6,620	11,120 00
London, 1869.....	13,428 00	7,649	11,459 50
Toronto, 1870.....	13,740 50	6,337	12,243 50

TABLE C.—STATEMENT showing the number and amount of Prizes in each Toronto.

COUNTIES.	HORSES.		CATTLE.		SHEEP.		SWINE.	
	No. of Prizes.	Amount.	No. of Prizes.	Amount.	No. of Prizes.	Amount.	No. of Prizes.	Amount.
		\$ cts.		\$ cts.		\$ cts.		\$ cts.
Addington								
Brant	1	15 00			7	81 00		
Bruce								
Carleton			2	32 00				
Dundas			8	249 00				
Durham	9	73 00	18	273 00	9	79 00	3	39 00
Elgin								
Essex								
Frontenac							1	15 00
Glengarry								
Grenville								
Grey	1	14 00	1	10 00				
Haldimand	4	81 00						
Halton	4	83 00					6	60 00
Hastings			2	20 00	2	72 00	1	9 00
Huron	3	50 00			1	10 00	3	27 00
Kent								
Lambton								
Lanark								
Leeds								
Lennox					1	10 00		
Lincoln			1	30 00	2	13 00		
Middlesex					4	45 00		
Norfolk								
Northumberland					2	24 00		
Ontario	11	145 00	30	560 00	14	175 00	3	42 00
Oxford							1	9 00
Peel	6	72 00	9	118 00	15	307 00	11	135 00
Perth	1	6 00			3	29 00		
Peterboro'								
Prescott								
Prince Edward							5	60 00
Renfrew								
Russell								
Simcoe	8	203 00						
Stormont								
Victoria								
Waterloo	1	18 00	1	15 00	4	45 00		
Welland	1	16 00						
Wellington	5	66 00	52	784 00	13	179 00	3	30 00
Wentworth					1	10 00	16	213 00
York	47	580 00	24	360 00	15	125 00	5	39 00
Other Localities								
Totals	102	1,427 00	148	2,451 00	93	1,204 00	58	678 00

general class awarded to each County in Ontario at the Provincial Exhibition at 1870.

POULTRY.		IMPLEMENTS.		GRAINS AND SEEDS.		FIELD ROOTS.		FRUITS AND WINES.		GARDEN VEGE-TABLES.	
No. of Prizes.	Amount.	No. of Prizes.	Amount.	No. of Prizes.	Amount.	No. of Prizes.	Amount.	No. of Prizes.	Amount.	No. of Prizes.	Amount.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
3	8 00	9	43 00	2	6 00			6	15 00		
				2	4 00						
2	6 00	11	87 00	11	94 00	2	5 00			7	14 50
		3	28 00								
				3	9 00	1	1 00			1	1 50
		2	11 00								
		1	4 00								
4	10 00	3	20 00					4	7 00		
		3	14 00					2	6 00		
		2	3 00			1	8 00	5	9 50		
		1	4 00								
		3	13 00								
		1	2 00								
		1	4 00								
5	18 00	11	40 00	5	26 00	2	7 00	73	205 50	2	2 00
21	65 00	14	63 00	3	27 00						
4	10 00			14	98 00	10	21 00				
4	16 00	14	82 00	2	12 00						
5	16 00	4	17 00	2	4 00						
1	2 00	3	16 00			1	3 00	2	9 00		
		2	8 00	1	4 00						
1	2 00	2	10 00	2	18 00						
		1	10 00	1	15 00						
		2	14 00	1	6 00					3	5 00
		2	3 00								
2	6 00	12	71 00					1	3 00		
		4	39 00	7	34 00					1	1 50
				1	6 00	11	22 00	4	9 00	10	15 00
2	3 00	6	40 00	7	54 00	1	2 00	26	105 00	15	26 00
		8	62 00					53	152 00	50	77 50
15	42 00	34	282 00	19	169 00	42	91 00				
		6	33 00								
69	204 00	165	1023 00	83	586 00	71	160 00	176	521 00	89	143 00

TABLE C.—STATEMENT showing the num-

COUNTIES.	PLANTS AND FLOWERS.		DAIRY PRODUCTS, PROVISIONS, &C.		CABINET WARE, CARRIAGES, &C.		DRAWINGS, ARCHITECTURE, FINE ARTS, &C.	
	No. of Prizes.	Amount.	No. of Prizes.	Amount.	No. of Prizes.	Amount.	No. of Prizes.	Amount.
		\$ cts.		\$ cts.		\$ cts.		\$ cts.
Addington								
Brant					1	7 00	5	40 00
Bruce								
Carleton								
Dundas								
Durham					5	37 00		
Elgin								
Essex							3	32 00
Frontenac								
Glengarry								
Grenville			1	2 00				
Grey								
Haldimand								
Halton			2	4 00	9	18 00	3	5 00
Hastings					1	12 00	2	17 00
Huron			1	5 00			5	18 00
Kent								
Lambton								
Lanark								
Leeds					2	9 00		
Lennox					1	3 00	8	55 00
Lincoln	2	2 50	3	11 00	4	32 00	2	5 00
Middlesex			2	18 00	11	60 00	7	48 00
Norfolk								
Northumberland			1	25 00	3	12 00	1	4 00
Ontario			5	20 00	2	5 00	4	12 00
Oxford			6	40 00	4	13 00		
Peel					1	3 00	1	4 00
Perth			2	24 00				
Peterboro'					2	3 50	1	6 00
Prescott								
Prince Edward					1	8 00		
Renfrew								
Russell								
Simcoe			1	6 00	1	3 00		
Stormont								
Victoria								
Waterloo			1	30 00				
Welland								
Wellington	5	10 00	5	36 00	9	74 60	3	16 00
Wentworth	12	21 00	4	10 00	3	5 50	7	34 00
York	36	98 50	23	84 00	24	119 00	82	472 00
Other Localities					1	4 00	23	127 00
Totals	55	132 00	57	315 00	85	438 60	157	895 00

ber and amount of Prizes, &c.—*Concluded.*

LADIES' WORK.		MACHINERY, CASTINGS, TOOLS, &c.		MUSICAL IN- STRUMENTS, NATURAL HIS- TORY, PAPER, PRINTING, &c.		LEATHER MANUFAC- TURES, SADD- LERY, SHOE & BOOT WORK, &c.		WOOLLEN, FLAX AND COTTON GOODS, FURS, &c.		TOTAL AWARDED EACH COUNTY.	
No. of Prizes.	Amount.	No. of Prizes.	Amount.	No. of Prizes.	Amount.	No. of Prizes.	Amount.	No. of Prizes.	Amount.	No. of Prizes.	Amount.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
1	1 00	7	69 00	1	3 00	2	13 00			2	6 00
										45	299 00
6	13 60	2	14 00	2	50 00			2	15 00	2	32 00
										8	249 00
		1	5 00							89	799 50
										3	28 00
								2	8 00	3	32 00
										9	39 50
3	6 00										
1	3 00									4	8 00
										5	38 00
1	2 00	1	5 00							5	85 00
				1	10 00			1	5 00	38	224 00
		1	3 00					2	7 00	16	167 00
										22	133 50
										1	4 00
				1	15 00					3	13 00
										1	15 00
										3	11 00
1	3 00	4	40 00							11	72 00
								2	7 00	119	442 00
										62	326 00
20	41 50	1	3 00								
13	25 50	2	10 00	1	8 00	1	3 00	1	4 00	57	242 50
10	13 50			1	6 00			1	3 00	107	1118 50
2	3 50	2	8 00							33	118 50
		2	17 00			12	38 00	11	45 00	65	725 50
										23	126 00
										8	39 50
										8	93 00
4	10 60	1	6 00								
						2	10 00	1	6 00	21	253 00
		9	99 00			15	55 00	5	25 00	3	16 00
1	1 00					1	3 00	4	14 00	2	3 00
5	8 00	5	27 00	9	60 00	16	46 00	8	40 00	52	367 00
		32	186 00	3	7 00	2	9 00			19	108 50
55	101 50	73	430 00	22	141 00	14	68 00	1	3 00	172	1471 00
		14	76 00	1	6 00	6	35 00	13	78 00	137	744 50
										634	3434 50
										64	359 00
123	232 50	157	998 00	42	306 00	72	280 00	54	260 00	1856	12243 50

THE VETERINARY COLLEGE.

The Council have again the pleasure to report that the Ontario Veterinary College continues to make most satisfactory progress under the able and experienced direction of the Principal, Professor Smith, V.S.

The winter session of 1869-70 was attended by thirty students, whose object was to study the science of veterinary medicine as a profession. The course was also attended by a number of young men who were attending the Agricultural Class in the University.

The building erected by Mr. Smith on Temperance Street, to be used as a Veterinary College, was opened for lectures, dissections, &c., in February, and has proved of great advantage in facilitating the studies of the various branches taught. Being situated in close proximity to the Infirmary, it gives superior advantages to the students as regards the practice of their profession.

The session of last winter closed on the 1st of April, and on the 7th the annual examination of students for the diploma of the Association took place. Mr. Clark, V.S., Royal Artillery; Mr. Hagyard, V.S., Brampton; Mr. Cowan, V.S., Galt; Mr. Thomas, V.S., Guelph; and Mr. Cathers, V.S., Lindsay, acted as examiners, and were assisted in Anatomy and Materia Medica by Drs. Thorburn, Bovell and Rowell, of Toronto. The following gentlemen passed their final examination and obtained their diplomas, viz: Mr. B. Richardson, Simcoe; Mr. Lloyd, Newmarket; Mr. James Caesar, Sandhill; and Mr. John Craig, Hamilton. Five students also passed a primary examination in Anatomy, viz: A. Harthill, Toronto; Mr. John Bryce, Mount Pleasant; Mr. Edward Mayhew, Sandhill; Mr. Charles Elliott, Sandhill; and Mr. Bailey, King. The examiners expressed themselves highly satisfied with the standard of the examination and the answers received. The Council has the testimony of Dr. Beatty, of Cobourg, lately a member of this body, who attended the examinations on behalf of the Council, and is well qualified to give an opinion, that he had been much gratified at the proficiency exhibited by the students; that some of them passed a really brilliant examination, and displayed a knowledge of anatomy which would do credit to any Medical School in the Province. In short, the Council is satisfied that the course of instruction given at this institution, is a thoroughly practical and efficient one, and well adapted to prepare the students for the successful practice of the Veterinary Art, as a profession.

The session of 1870-71 commenced October 20th, and is attended by fifty students. At the end of the fall term, four of those gentlemen who had passed a primary examination in April, were awarded the diploma of the Council, after undergoing a strict examination in Pathology and Materia Medica. Mr. Hagyard, V.S., Brampton; Mr. Cowan, V.S., Galt; Mr. Wilson, V.S., London; and Drs. Thorburn and Bovell, of Toronto, acted as examiners. The successful candidates were Messrs. A. Harthill, John Bryce, Edward Mayhew, and Charles Elliott.

It is gratifying to find that the graduates of the Ontario College are meeting with every encouragement in the practice of their profession throughout this Province. The Council would direct the attention of the public to the fact, that by an amendment to the Agricultural and Arts Act, passed at the late session of the Ontario Legislature, any person is prohibited under penalty from assuming the title of Veterinary Surgeon, unless authorized to do so by some duly qualified Veterinary School or College.

The following is the course of study during the current session :

PROFESSORS :

ANDREW SMITH, V.S., Edin., Principal.....	<i>Anatomy and Diseases of Farm Animals.</i>
J. THORBURN, M.D., Edin.,	<i>Veterinary Materia Medica.</i>
MICHAEL BARRETT, M.D.	<i>Animal Physiology.</i>
A. SMITH, V.S., and Assistant.....	<i>Clinical Instruction.</i>
H. H. CROFT, D.C.L., University College.....	<i>Chemistry.</i>
GEO. BUCKLAND, " "	<i>The History, Breeding and Management of the Domesticated Animals.</i>

Students intending to prepare themselves for the practice of the Veterinary Art, as a profession, are required to attend two sessions, at least, and pass the examinations. The diploma

will be granted on passing the final examination, certifying that the holder thereof is competent to practise his profession.

Students are strictly required to devote the interval between the sessions to the practise of the profession, under some approved and duly qualified practitioner.

In addition to the above, provision is made to meet the wants of young men intended for or already engaged in Canadian farming, by a course of familiar instruction in the science and practice of Agriculture. In this department Professor Buckland is assisted by several of his colleagues,—the Professors of Chemistry, Geology, Natural History, and Meteorology, in University College. The course is free only to Agricultural Students, and continues about six weeks.

Students attending two sessions of this institution can obtain the diploma of the Royal College of Veterinary Surgeons, or that of Edinburgh, after attending one session and passing the examination at either of the Colleges of London or Edinburgh.

FINANCES.

The total amount received by the Treasurer of the Association during the year 1870, including a balance of \$1649.97 from 1869, was \$34,893.68, and the total expenditure \$28,639.64, leaving a balance on hand as found by the auditors at the end of the year, of \$6,254.04. The suit in Chancery against the late Treasurer has been decided in favour of the Council, leaving a sum of over \$13,000.00, with the interest accrued, to be received from that source. The arbitration case with the University has not yet been settled, but the Council trusts that it will be arranged at an early day. Subjoined is an abstract statement of the receipts and expenditures for the year, the details of which have been already printed and distributed to the County Societies.

Abstract of the detailed statement of receipts and disbursements of the Agricultural and Arts Association, for the year 1870 :—

RECEIPTS.	\$ cts.	DISBURSEMENTS.	\$ cts.
Balance from 1869.....	1,649 97	Prize account.....	12,289 50
Miscellaneous accounts.....	771 54	Board Expenses.....	1,469 75
Prize account.....	176 00	Printing and stationery.....	1,431 28
Rent account.....	1,000 00	Exhibition expenses.....	8,162 40
Legislative grant.....	10,000 00	Miscellaneous accounts.....	2,177 68
Exhibition receipts.....	20,923 53	Legal expenses.....	410 72
Denison account.....	250 00	Veterinary School.....	550 00
Interest account.....	122 64	Salaries account.....	2,148 31
		Balance.....	6,254 04
	\$34,893 68		\$34,893 68
1871, Jan. 1. To balance.....	\$6,254 04		

Adopted at Toronto, Feb. 28, 1871.

HUGH C. THOMSON,
Secretary.

JAMES SKEAD,
President.

PROVINCIAL EXHIBITION OF 1871.

OFFICE OF THE AGRICULTURAL AND ARTS ASSOCIATION OF ONTARIO,

TORONTO, December 1st, 1871.

To the Hon. JOHN CARLING,

Commissioner of Agriculture, &c., &c., Toronto.

SIR,—In accordance with requirement of the Amended Agricultural and Arts Act of the last Session of the Legislature, I beg leave to submit a Report of the Provincial Exhibition held at Kingston on the 25th to 29th September last, with a view to showing the progress made in the respective departments of this exhibition, as compared with the exhibitions of previous years.

The Exhibition of 1871, as an exposition of the progress making in the various im-

portant branches of Agriculture and Horticulture in Ontario, was eminently satisfactory and successful. All the important branches were well represented, and the quality of the horses, cattle, sheep, swine, poultry, grain, roots, fruit, &c., was, on the whole, fully equal, and, perhaps, in some cases, superior to that on any former occasion. The amount offered to be competed for in prizes was \$15,724 50, against \$13,750 50 in 1870, \$13,428 00 in 1869, \$13,304 50 in 1868 and \$12,731 00 in 1867. The number of entries was 6,679 against 6,897 in 1870, 7,549 in 1869, 6,620 in 1868, and 4,825 in 1867. The entire amount awarded in prizes was \$12,951 00, against \$12,243 50 in 1870, \$11,459 50 in 1869, \$11,120 00 in 1868, and \$9,311 59 in 1867. It will thus be seen that the number of entries and the amount awarded bear a fair proportion to the amount offered, as compared with any of the recent previous exhibitions, going back to the year 1867, when the exhibition was last held at the same point.

But, of course, the mere number of entries at an exhibition does not always furnish a correct criterion by which to judge of its success, or non-success, in all those respects which make an exhibition valuable to the public, as a school of instruction to those who require to be educated up to a higher standard in regard to the articles they produce, and also as exhibiting to strangers and to ourselves what our soil and climate, and our industrious artisans are capable of producing. It is quite possible at such an exhibition to obtain a large number of entries in some particular classes of a comparatively unimportant character, or even numerous entries of comparatively worthless articles in the important classes, which will swell up the aggregate to a large figure, but which will be no benefit, but rather a deterioration, to the general character of the exhibition. This was not the case at the late exhibition at Kingston. There was no excessive number of entries in any particular class, and, as a general rule, the animals and articles exhibited were of superior character. The honours of the prizes are keenly contended for. Our leading breeders, implement manufacturers and others, spare no pains or expenditure to bring forward the best animals and articles they can obtain or produce of the respective kinds; and exhibitors, or would-be exhibitors, know that it would be a waste of time and expense to bring inferior animals or articles to an annual exhibition where they have to enter into competition with the best products of the whole Province.

Taking the late exhibition as a whole, I have stated above, that in the classes of live stock, agricultural and horticultural products, it would compare very favourably with and in some respects, bear the palm away from any of its predecessors. In the Arts and Manufactures Department, as compared with some of the most successful of the previous exhibitions, there was, perhaps, in some of the classes, a slight falling off. This was more particularly noticeable in the classes of machinery, castings and tools—a circumstance probably to be accounted for by the fact of the manufactories of such products being chiefly situated in the more western parts of the Province.

I beg leave to submit herewith a statement showing the amount offered in prizes in the various classes at the late exhibition, the amount awarded and the number of entries, also the number of entries in each class at the four previous exhibitions.

On examining this statement, it will be seen that in the class of Blood Horses, never very numerously represented, there were 22 entries, being 4 less than in 1870, but a greater number than at any other of the three previous shows.

In Roadsters and Carriage Horses, an important class, there were 266 entries, being under the number in 1869 and 1867, but in advance of 1870 and 1868.

In Agricultural Horses there were 103 entries, against 137 each in 1870 and 1869, 134 in 1868, and 96 in 1867.

In Heavy Draught Horses, the number of entries was 74, being less than in 1870, equal to 1869, and exceeding the two previous years. There were some magnificent animals shown in this class.

For the Prince of Wales' Prize, which was given this year to the Best Herd of Durham Cattle, there were 8 entries, being a greater number than in any year except 1868, when there were 14 entries for the Best Herd of Cattle of any breed. The entries for this prize this year were made up of very superior animals.

In the class of Durham Cattle, in which the largest amount of prizes is offered, and in which a greater amount of interest centres than in any other at the exhibition, there were 149 entries, exceeding the number at any of the previous exhibitions except in 1870 at

Toronto. The recent importations of Messrs. Miller, Snell and others, gave a very high character to this class at the late exhibition.

In Herefords there were 24 entries, being a little under the number at previous shows. This valuable breed of cattle has as yet got into very few hands, and consequently there was no competition. The animals exhibited were, however, of the highest order of merit.

In Devons there were 78 entries, exceeding the number at any of the four previous shows.

In Ayrshires there were 235 entries, being nearly double the number at any of the previous exhibitions. This breed is largely patronized in the more eastern portions of Ontario for dairy purposes.

In Galloway Cattle there were 47 entries, being a little under the number at the four previous shows.

In Grade Cattle, an important class, there were 73 entries, against 76 in 1869, and exceeding the number at the three other shows.

In Fat and Working Cattle 33 entries, being a little under the average number.

In Cotswold Sheep, one of the most important classes at the exhibition, there were 161 entries, being a greater number than in any of the previous years, and exhibiting great excellence in the quality of the animals shown.

In Leicester Sheep there were 176 entries, against 167 in 1870, and falling below the other three previous shows in number.

In Southdowns 77 entries, exceeding previous years except in Hamilton in 1868.

In Shropshire, Hampshire, and Oxfordshire Downs, there is no advance in the number shown, but rather a falling off since 1867.

In Merino Sheep, the number shown has remained nearly stationary for the last three years, and has fallen below the number exhibited in 1868.

In Fat Sheep the entries show an advance over previous years.

In Large Breeds of Pigs, the number shown was nearly double that at Toronto last year, equal to 1869, and below the two previous years.

The Small Breeds of Swine meet with more favour. The number shown in all the classes was 246, against 176 in 1870, 196 in 1869, 116 in 1868, and 119 in 1867. The show in this very important class of live stock was probably much the best we have ever had in Ontario.

In Poultry, a very interesting class, attracting much attention, the number of entries was 393, being greater than at any previous show, except at London in 1869.

In Agricultural Implements, in all the classes, there were 421 entries, being about equal to 1870, below 1869 and above the two previous years. Owing to difficulties of transport or other causes, there was a greater deficiency in the number of articles brought forward in proportion to the entries, in this class, than usual.

In Products of the Field, grain, seeds, roots, &c., in all the classes, there were 284 entries, exceeding any previous year except 1869 at London, and in the quality of the samples shown, the exhibition was amongst the best, if not quite the best, we have ever had.

In Fruit, in the several classes, there were 810 entries, being a much greater number than any previous year except 1870 at Toronto, and the display in these classes was altogether most imposing and attractive, affording most conclusive practical evidence of the great fruit producing resources of this Province.

In Garden Vegetables, plants and flowers, and Dairy products, the exhibition compared favourably with previous years, although the entries fell short, by nearly one-half of the large number obtained in these classes in 1869. Dairy Husbandry has attained considerable development in the eastern section of the country, and this class was well represented.

For a comparison in regard to the remaining classes, I beg leave to refer to the subjoined statement, which will show at a glance the entries in each class in the different years.

I have confined myself in this comparison to the five years commencing and ending with the two latest exhibitions at Kingston, as this will show readily the progress made since the exhibition was last held in the same locality. I have not considered it necessary to go back to an earlier date, as it will be readily admitted that there has been a steady progressive advance made in the character of the Annual Exhibitions from their first institution to the present time.

Carriages and Sleighs, &c.....	263 00	184 00	70	112	144	86	58
Chemical Manufactures, &c.....	88 00	26 00	12	31	20	29	18
Drawings, Engravings, Building Materials, &c.....	312 00	127 00	58	86	82	75	43
Fine Arts, Oil Paintings, Photography, &c.....	477 00	283 00	75	170	124	294	91
Fine Arts, Water Colours, Pencil, Crayon, &c.....	407 00	329 00	209	245	168	197	124
Groceries and Provisions.....	161 00	108 00	70	47	76	74	63
Ladies' Work, Braiding, Embroidery, &c.....	117 00	145 00	327	282	212	235	237
Ladies' Work, Flowers, Wax, Worsted, &c.....	120 00	96 00	150	100	151	74	128
Machinery, Castings and Tools.....	514 00	100 00	37	150	116 }	215	
Machines, Sewing and Knitting.....	84 00	48 00	23	51	27 }	149	79
Metal Work, including Stoves, &c.....	260 00	213 00	39	230	161	85	51
Musical Instruments.....	201 00	146 00	26	37	28	29	37
Natural History.....	160 00	108 00	29	28	19	13	20
Paper, Printing, Bookbinding, &c.....	98 00	33 00	18	56	30	31	13
Saddlery, Trunkmakers' Work, Leather, &c.....	259 00	91 00	36	90	70	76	72
Shoe and Bootmakers' Work, Tools and Leather.....	177 00	72 00	25	82	91	57	43
Woollen, Flax and Cotton Goods, Furs, &c.....	448 00	325 00	163	183	203	133	144
Totals.....	\$15724 50	12951 00	6679	6897	7649	6020	4825

Financially the Exhibition was not, as compared with previous exhibitions at other places, attended with very great success, although the receipts were considerably larger than on any previous occasion at the same point. The total receipts from members' subscriptions, sale of catalogues, forage, rent of horse stalls, refreshment stands, admission fees, and material sold after the exhibition, amounted to \$7593 51, against \$5521 49 from the same sources in 1867.

Previous to the Exhibition, and to a certain extent connected with it, a public competitive trial, in the field, of the more important agricultural implements, took place, under the auspices of the Association, at Paris, on the 19th and 20th July. The trial of the implements occupied two days, and was attended by a large number of spectators. The amount offered in prizes was \$679, the number of entries, 167, and the amount of prizes awarded, \$575.

I have the honour to be,

Sir,

Your obedient Servant,

HUGH C. THOMSON,

Secretary.

APPENDIX TO REPORT

OF THE

Commissioner of Agriculture and Arts.

APPENDIX (C).

REPORT OF THE ASSOCIATION OF MECHANICS' INSTITUTES OF ONTARIO;
AND ANALYSIS OF REPORTS OF MECHANICS' INSTITUTES.

APPENDIX TO REPORT

OF THE

Commissioner of Agriculture and Arts.

APPENDIX (C).

REPORT OF THE ASSOCIATION OF MECHANICS' INSTITUTES OF ONTARIO ;
AND ANALYSIS OF REPORTS OF MECHANICS' INSTITUTES.ASSOCIATION OF MECHANICS' INSTITUTES FOR ONTARIO,
Toronto, Oct. 10th, 1871.

SIR,—In accordance with Section 24 of the Agricultural and Arts Act, I herewith enclose to you a copy of the Report of the Council, and of the proceedings of the Association at its Annual Meeting, held in the city of Kingston, on the 27th of September, ultimo.

I have the honour to be, Sir,

Your obedient Servant,

WM. EDWARDS,

*Sec'y-Treasurer.**To the HON. JOHN CARLING,**Commissioner of Agriculture and Public Works, Province of Ontario.*

ASSOCIATION OF MECHANICS' INSTITUTES, OF ONTARIO.

Toronto, 10th October, 1871.

SIR.—I beg to forward you the annexed copy of the proceedings of the Annual Meeting of the Association, and the Report of the Executive Committee, adopted at the Annual Meeting held in the City of Kingston, on the 27th September.

I again beg to remind you that Affiliated Institutes are supplied with both the English "Bookseller" and the "American Literary Gazette," for a subscription of \$1 50 per annum, the ordinary subscription thereto being about \$4 00 per annum. The former of these works is issued monthly, and the latter semi-monthly; thus supplying the latest, and very full, lists of all New British and American Books, or re-issues of Old Works; besides furnishing Critical Notices, and Notices of Works in Press. Institutes subscribing for these Works, before the 1st of November, will secure the extra large and illustrated Christmas number.

I would also remind you that books in general literature, and H. C. Baird's Industrial

and Technical Works, can be purchased through this Association, at 20 per cent. off the usual retail prices. An arrangement is also made for books from the Educational Depository, at 10 per cent. off the usual Catalogue rates.

Any Institute intending to apply for aid under the Statute, for the present year, must do so not later than the first of December. Particular attention is directed to the condition of the Grants: to the copy of Annual Report required to be furnished to the Bureau of Agriculture and Arts, and to the remittance of 5 per cent. of Grants received to the undersigned, as Treasurer of this Association. See clause 25 of the Agricultural and Arts Statute, copies of which can be obtained on application.

Institutes having received Legislative Grants for the past year, and not having yet remitted the 5 per cent. thereon in accordance with the requirements of the Statute, are not entitled to claim any further aid until such conditions are complied with.

I shall be happy to give any explanations respecting the operations of the Statute, or to receive any suggestions tending to make this Association more serviceable to Affiliating Institutes.

I have the honour to be, Sir,

Your obedient Servant,

WM. EDWARDS.

Sec'y-Treasurer.

To the Secretary of

Mechanics' Institute.

MECHANICS' INSTITUTE ROOMS,
Kingston, Sept. 27th, 1871

The Annual Meeting of the Association was held this evening, at 7-30 o'clock, in the Rooms of the Mechanics' Institute—the President, James Young, Esq., M. P., in the Chair.

Credentials were submitted by the following delegates from Mechanics' Institutes:—

GALT—James Young, Esq., M. P., and John Allan, Esq.

ST. CATHARINES—J. C. Rykert, Esq., M.P.P., and George P. M. Ball, Esq.

THOROLD—E. H. Shourds, and John Morley, Esqs.

TORONTO—John Fensom, Esq.

The following delegates had only been provided with one set of credentials, covering representation at both the Agricultural and Arts and this Association:—

BRIGHTON—John Bowles, and Peter Begg, Esqs.

GUELPH—John McNeill, and David McCrae, Esqs.

HAMILTON—E. George Conklin, Esq.

MOUNT FOREST—Dr. Eckroid, and James McMullin, Esq.

On motion of Mr. Allan, seconded by Mr. Fensom, it was

Resolved—That the credentials presented by the several delegates from Mechanics' Institutes, be accepted.

The Secretary read the Minutes of the last Annual Meeting of the Association.

The Report of the Executive Committee was read by the Secretary, when it was moved by Mr. McCrae, and seconded by Mr. Begg, that the Report just read be adopted.

The Secretary explained the nature of the Examinations formerly held by the late Board of Arts and Manufactures, referred to in the Report. After considerable discussion on the subject of the proposed Examinations, the Report was adopted.

The President suggested that, if the members desired to proceed with the Examinations, a resolution to that effect should be passed. It was

Moved by Mr. Begg, seconded by Mr. Fensom, and

Resolved—That if the Executive Committee deem it desirable to establish Examinations and Prizes, as proposed in the Annual Report, during the ensuing year, they are hereby authorized to do so.

Moved by Mr. Allan, seconded by Mr. Bowles, and

Resolved—That the sum of \$100 be paid the Secretary-Treasurer, for services during the past year; and that the same be charged in the account now submitted.

The following members were then elected as Office-bearers for the ensuing year :—

President: James Young, Esq., M.P., of Galt.

Vice-President—John Morley, Esq., of Thorold.

Secretary-Treasurer—Wm. Edwards, Esq.

Executive Committee—Dr. Beatty, of Cobourg; David McCrae, of Guelph; John Fensom, of Toronto, and Peter Begg, of Brighton.

Several members suggested subjects for discussion at the next Annual Meeting. On motion of Dr. Eckroid, the Secretary was requested to prepare a paper on the best method of classification of Books in the Catalogue and on the Shelves of Mechanics' Institute Libraries; and the best system of recording the books taken out and returned by the Members.

The meeting then adjourned.

WM. EDWARDS, *Secretary*.

REPORT.

The Executive Committee of the "Association of Mechanics' Institutes of Ontario," beg to present their Third Annual Report of its proceedings.

During the current year, and up to the present date, eighteen Mechanics' Institutes have affiliated with this Association, by participating in the Legislative Grant under the Agricultural and Arts Act. In order to show what Institutes have availed themselves of the liberal grants now allowed by the Legislature, we annex the following list of those which have received moneys during the present and two previous years :—

No.	Name.	1869.	1870.	1871.
1.	Ayr Mechanics' Institute.....	\$ 41.84	\$167.00	\$
2.	Berlin "	103.48	137.14	
3.	Bowmanville "	125.00	150.00	
4.	Bradford "			200.00
5.	Brantford "	100.00	200.00	400.00
6.	Brampton "		30.00	
7.	Brighton "	100.00	50.00	
8.	Clinton "		200.00	
9.	Collingwood "		100.00	
10.	Dundas "	200.00	200.00	400.00
11.	Grimsby "			400.00
12.	Galt "	100.00	100.00	400.00
13.	Guelph "			293.00
14.	Hamilton "	200.00	200.00	400.00
15.	Ingersoll "			400.00
16.	Kingston "	200.00		
17.	London "			400.00
18.	Meaford "	107.59	50.00	
19.	Merrickville "	63.00	50.00	
20.	Mitchell "	100.00		
21.	Milton "	50.00		
22.	Mt. Forest "		41.88	125.50
23.	Newmarket "	30.00		
24.	Oshawa "	200.00		
25.	Port Perry "			400.00
26.	Paris "	150.00	100.00	200.00
27.	Port Elgin "		100.00	
28.	Peterborough "	200.00	200.00	400.00
29.	Richmond Hill "		52.68	70.00
30.	Searorth "	200.00		
31.	Schomberg "	30.00		
32.	Streetsville "	197.00	200.00	

No.	Name.	1869.	1870.	1871.
33.	Smith's Falls "	40.00	60.00	150.00
34.	Simeoe "			400.00
35.	Stratford "	119.50		
36.	St. Mary's "		109.00	
37.	Toronto "	200.00	200.00	400.00
38.	Thorold "	100.00	100.00	400.00
39.	Whitby "	150.00		
49.	Woodstock "	200.00	150.00	
Totals.....		\$3307.41	\$2947.70	\$5838.50

A few of the Institutes which received grants under the Act, for the year 1870, have not yet paid the 5 per cent. thereon to the Treasurer of this Association. Your Committee would remind all such that until this percentage is paid, no Institute will be entitled to claim Legislative Aid for the present year.

As the time for making Applications under the Act for grants for 1871, will not expire until the first of December next, it is anticipated, and earnestly hoped, by your Committee, that a number of other Institutes will yet avail themselves of its provisions.

In accordance with instructions given by the Delegates at the last Annual Meeting at Toronto, a petition to the Government of Ontario was drawn and signed by the President of this Association and the Members of the Executive Committee, praying "That Mechanics' Institutes should, as regards aid from the public funds, be placed on the same footing as Agricultural Societies." Your Committee are happy to be able to report that this effort was successful, if not in getting all that was asked, at least in getting the grants to Mechanics' Institutes made much more liberal than before. An amendment to the Agricultural and Arts Act was passed by the Legislature during last session, providing that each Institute shall receive two dollars for every one dollar subscribed, up to a maximum of four hundred dollars; whereas formerly they only received dollar for dollar up to a maximum of two hundred dollars.

Before leaving this point, we would call the attention of the Mechanics' Institutes of the Province to the great importance of taking advantage of the liberal grants which have thus been secured.

The Secretary of the Association has purchased books during the year for a number of the Affiliated Institutes, and several others have made their purchases direct by their own officers, on the liberal terms which this Association has secured.

Copies of the latest editions of the Catalogue of the valuable Industrial Works published by H. C. Baird, of Philadelphia, have just been sent to all the Mechanics' Institutes in the Province. These books are now kept in stock by Mr. A. Piddington, Toronto, who will supply them on the same terms as other American books are supplied this Association.

Twelve copies of the English "Bookseller," and the same number of the "American Publishers' Circular," have been subscribed for this year; but only seven of these works have been applied for by Affiliated Institutes, namely:—Brantford, Brighton, Collingwood, Galt, Hamilton, Schomberg, and Thorold.

Your Committee regret that, notwithstanding the liberal grants offered by the Act, so few Evening Classes have been established by Mechanics' Institutes throughout the Province. The great good which such instruction is calculated to effect, particularly in the case of young men following mechanical pursuits, leads your Committee to express the hope that before many years Evening Class instruction will be a prominent feature of all our more enterprising Associations. With a view to encourage such classes, your Committee desire to suggest to the Annual Meeting whether it would not be advisable at this, or at the next Annual Meeting, to establish a system of Examinations of Members of Mechanics' Institute Classes, on a similar principle to that formerly used by the late Board of Arts and Manufactures, and that prizes should be offered by this Association to a limited number of these Institute Classes, whose Examinations shall come up to the standard which may be prescribed.

The Treasurer's detailed statement is hereto appended, showing the total receipts since the last Annual Meeting to have been \$329.69; the expenditure, \$175.47; and the balance

on hand, \$154.22. In addition to this balance on hand, a sum of upwards of one hundred dollars is due by Institutes which have received grants for this year, but have not yet paid the 5 per cent. thereon to the Treasurer of this Association. All which is respectfully submitted.

JAMES YOUNG, *President.*

TREASURER'S DETAILED STATEMENT.

RECEIPTS.

		\$ cts.	\$ cts.
1870.			12 47
October 5.	By Balance on hand.....		
" 5.	By London Mechanics' Institute, Affiliated fee....	1 00	
" 5.	By Woodstock " " 5 ¢ on L. G. '70	7 50	
" 5.	By Berlin " " 5 " "	6 85	
" 13.	By Streetsville " " 5 " "	10 00	
" 20.	By Paris " " 5 " "	5 00	
" 24.	By Hamilton " " 5 " "	10 00	
Nov'b'r. 2.	By St. Mary's " " 5 " "	5 45	
" 19.	By Peterboro' " " 5 " "	10 00	
Dec'br. 9.	By Merrickville " " 5 " "	2 50	
" 21.	By Brighton " " 5 " "	5 00	
1871.			
Jan'yry 9.	By Port Elgin " " 5 " "	5 00	
" 9.	By Thorold " " 5 " "	5 00	
" 9.	By Brighton " for "Bookseller."...	1 50	
" 9.	By Thorold " " "...	1 50	
" 28.	By Collingwood " " "...	1 50	
" 28.	By " " " 5 ¢ on L. G. '70.	5 00	
March 6.	By Galt " for "Bookseller"...	1 50	
April 14.	By Brantford " " "...	1 50	
July 27.	By Smith's Falls " " 5 ¢ on L. G. '71.	7 50	
Aug. 2.	By Peterboro' " " 5 " "	20 00	
" 30.	By Bradford " " 5 " "	10 00	
Sept. 19.	By Grimsby " " 5 " "	20 00	
" 18.	By Brantford " " 5 " "	20 00	
" 19.	By Brighton " " 5 " "	2 50	
" 19.	By Hamilton " " 5 " "	20 00	
" 19.	By Toronto " " 5 " "	20 00	
" 20.	By Galt " " 5 " "	20 00	
" 20.	By Dundas " " 5 " "	20 00	
" 20.	By Thorold " " 5 " "	20 00	
" 22.	By Mount Forest " " 5 " "	6 77	
" 23.	By Paris " " 5 " "	10 00	
" 23.	By Ingersoll " " 5 " "	20 00	
" 26.	By Guelph " " 5 " "	14 65	
			317 22
			\$329 69

EXPENDITURE.

1871.			\$	cts.	\$	cts.
January	20.	To J. T. Rolph, for Corporate Seal.....	10	50		
"	20.	To G. W. Childs, Sub. 5 "American Literary Gazette"	11	25		
February	1.	To do. 1 do.	2	25		

1871.				\$	cts.	\$	cts.
February	2.—To	do. 2	do.	4	50		
"	9.—To	do. 1	do.	2	25		
March	6.—To	do. 1	do.	2	26		
April	13.—To	T. Cuttel & Sons, printing	.....	12	30		
Sept.	15.—To	" " " " Circulars.....		1	75		
"	25.—To	Copp, Clark & Co., 12 copies of "Bookseller."		24	00		
"	25.—To	postage account for the year		4	41		
"	27.—To	Secretary-Treasurer's salary for the year.....		100	00		
						175	47
		Balance on hand				154	22
						\$329	69

ANALYSIS

OF

REPORTS OF MECHANICS' INSTITUTES.

AYR MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Balance in hand.....	6 39	Books and periodicals bought in accordance with the conditions of Legislative Grant	290 00
Members' Subscriptions.....	76 57	Books otherwise purchased.....	3 54
Proceeds of exhibitions.....	78 51	Salaries.....	30 00
Legislative Grant.....	167 00	Incidentals	9 35
Miscellaneous	6 99	Balance in hand.....	2 57
	335 46		335 46

EXTRACTS FROM REPORT.

The Committee has great pleasure in reporting a very marked improvement in the condition and value of the library during the past year, more than 200 volumes having been added during that period. So large an addition would not have been possible had the Institute been left to its own unaided resources; but the committee, by taking advantage of the Statute authorizing a Government grant to Mechanics' Institutes, has received thereunder from the Government the sum of \$167, all of which sum, together with the local appropriation necessary to obtain the same, has been duly expended in accordance with the provisions of the Statute.

In addition to this, a considerable number of novels and works in light literature has been procured and added to the Library.

The Library now contains about 124 volumes, exclusive of periodicals and unbound pamphlets, and the Committee would recommend that increased facilities for the custody of the library should be placed at the disposal of the Librarian, there being at present too few shelves for the proper accommodation of the books.

The total number of volumes taken out during the year was 1,580, classified as follows: Fiction, 970; History and Travels, 438; Scientific Works, 172. This is exclusive of mag-

azines, reviews and periodicals, an estimate as to the reading of which cannot easily be arrived at.

During the month of April last the Ayr Literary Club amalgamated itself with the Institute, and the Club has since held its meetings under the Institute's auspices.

The sources of instruction and amusement offered during the past year have been various, consisting principally of a scientific lecture by the Rev. D. McRuer, and a series of fortnightly concerts and re-unions, which are still in progress.

BERLIN MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Balance in hand.....	68 79	Books bought in accordance with Statute.....	97 99
Members' Subscriptions.....	75 00	Evening Classes.....	124 00
Fees from pupils.....	46 40	Periodicals, &c.....	6 00
Legislative Grant.....	137 14	Repairs and Furnishing.....	36 00
		Rent.....	24 00
		Salaries.....	12 00
		Miscellaneous.....	16 81
		Balance in hand.....	10 53
	<u>327 33</u>		<u>327 33</u>

NOTE.—The Institute had 104 members; Library of 886 vols., of which there had been 2,246 circulations. In evening classes, 18 pupils in book-keeping and penmanship; 22 in arithmetic and mathematics, and 22 in English grammar and composition.

BRADFORD MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Members' Subscriptions.....	100 00	Balance due Treasurer.....	3 47
Legislative Grant.....	200 00	Books bought in accordance with Statute.....	288 87
Balance due Treasurer.....	123 59	Books, &c., otherwise purchased....	106 25
		Librarian.....	15 00
	<u>423 59</u>		<u>423 59</u>

NOTE.—The Institute had 100 members. In the disastrous fire on May 22nd, 1871, the whole of its Library, furniture, papers, &c., were totally consumed; consequently the Directors were unable to furnish a detailed report. At the end of the year 1871, they estimated the value of their new Library, furniture, &c., at \$600.

BRAMPTON MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Members' Subscriptions.....	106 75	Balance due Treasurer.....	5 07
Donations.....	39 25	Books bought in accordance with conditions of Legislative Grant..	60 00
Periodicals sold.....	24 05	Magazines, &c.....	51 85
Legislative grant.....	30 00	Rent, fuel, light, &c.....	95 50
Balance due Treasurer.....	12 37		
	<u>212 42</u>		<u>212 42</u>

NOTE.—The Library consists of 258 volumes, and 17 magazines and newspapers have been placed on the tables of the reading-room. The assets of the Institute, after deducting liabilities, are estimated at \$227.39.

BRANTFORD MECHANICS' INSTITUTE.

RECEIPTS.

	\$	cts.
Balance in hand.....	250	23
Members' Subscriptions.....	156	38
Fees from Pupils.....	29	75
“ from Lectures and Entertain- ments	304	65
Legislative Grant.....	200	00
Miscellaneous.....	44	07
	985	08

EXPENDITURE.

	\$	cts.
Books bought in accordance with the conditions of Legislative Grant...	280	00
Books otherwise purchased.....	232	74
Rent, repairs, fuel, &c.....	94	58
Evening Classes	36	17
Salaries.....	87	50
Miscellaneous	62	29
Balance in hand.....	191	00
	985	08

NOTE.—Prof. A. M. Bell gave two Shakesperian readings, from which a small profit only was realised. Assets estimated at \$1,210.

EXTRACTS FROM REPORT.

Your Committee of Management, in submitting the 34th annual report, beg to congratulate the members on the very prosperous state of the Institute, and the marked progress it has made during the past year, especially in comparison with former years.

The number of books in the Library was not given in last report, as they were not then arranged after the destruction of the Library and other property by fire, in the preceding January; now the number of volumes amounts to 1,006, classed as per schedule.

During the winter an effort was made to establish evening classes, which, your Committee are sorry to say, met with very little success, only one class, book-keeping and penmanship, obtaining sufficient patronage to secure its continuance, and consequently a small financial loss to the Society was the result.

On the 17th of August last the annual excursion to Buffalo and the Falls of Niagara, under the auspices of the Institute, was attended with great success, yielding to the funds of the Institute the net sum of \$293.45.

BRIGHTON MECHANICS INSTITUTE.

RECEIPTS.

	\$	cts.
Balance in hand.....	48	39
Members' Subscriptions.....	21	50
Fees from Readings.....	95	51
Legislative Grant.....	50	00
Miscellaneous.....	4	60
	220	00

EXPENDITURE

	\$	cts.
Books bought in accordance with the conditions of Legislative Grant...	60	43
Magazines, &c.....	20	08
Readings and Music.....	25	00
Salaries.....	36	00
Rent, fuel, &c.....	39	35
Miscellaneous.....	32	25
Balance in hand.....	6	89
	220	00

NOTE.—Twenty-two new members admitted during the year; 565 volumes in the Library; the reading-room supplied with twenty magazines and newspapers. Ten readings, accompanied by music, were given during the year.

CLINTON MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	cts.		\$ cts.
Balance in hand	41 13	Books bought in accordance with the conditions of Legislative Grant...	391 50
Members' Subscriptions.....	56 00	Books & periodicals otherwise bought	188 91
Fees from Re-unions	104 58	Expenses of Re-unions.....	34 54
Donations.....	76 00	Salaries.....	12 50
Amount received from Shares.....	294 40	Rent, insurance, &c.....	56 55
Legislative Grant.....	200 00	Miscellaneous.....	12 00
Miscellaneous	1 75	Balance in hand.....	77 86
	<hr/> 773 86		<hr/> 773 86

NOTE.—The Institute consists of 61 members, and has 655 volumes in its Library. Clear assets estimated at \$676. Six re-unions were held, comprising brief lectures, readings and music.

EXTRACTS FROM REPORT.

We are happy to say that by the recent amendment of the Agricultural and Arts Act, the claims of Mechanics' Institutes have been more liberally recognized than before,—the amount of the public grant having been doubled. The Institutes will now receive from the public treasury a sum equal to twice the amount which they expend in the purchase of books (other than works of fiction), and in maintaining evening classes, with the restriction that the amount so granted to any Institute is not to exceed \$400. Although this amendment does not yet place the Institutes on an equal footing with their sister associations, the agricultural societies, which receive (within certain limits) three times the amount their members contribute to them for all purposes whatever, we must yet acknowledge that the action of the present Government and Legislature towards the Institutes affords a gratifying contrast to the treatment which these associations have heretofore experienced. We cannot but think that the more our claims are considered, the more freely will our right to the aid we ask for be conceded. If agricultural societies, which merely hold exhibitions and distribute prizes twice a year, deserve liberal encouragement, as we freely admit, an equal encouragement at least is due to those Institutes whose libraries are a source of improvement all the year round, and remain a permanent possession and benefit to the community.

During the past year, six re-unions or literary entertainments have been given, which have been well attended, and have not only added considerably to the funds of the Institute, but have, we may venture to say, been welcomed by large numbers of our towns-people as affording at once innocent pleasure and useful instruction. In the proceedings were comprised three lectures, and a great variety of readings, recitations, and vocal and instrumental music.

COLLINGWOOD MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Members' Subscriptions.....	115 10	Books bought in accordance with the conditions of Legislative Grant ...	200 00
Fees from Lectures	16 50	Periodicals	9 25
Donations.....	20 00	Rent, fuel, light, &c.....	48 60
Legislative Grant.....	100 00	Lectures, &c.....	16 50
Miscellaneous	3 25		
Balance due Treasurer.....	19 50		
	<hr/> 274 35		<hr/> 274 35

NOTE.—The Institute has 112 members and subscribers, and 529 volumes in the Library. Two lectures and one reading were given. Assets valued at \$505.

EXTRACTS FROM REPORT.

Your Committee would also call attention to the increased aid now afforded by the Legislature of Ontario. By an amendment to the Act passed at the last session, Mechanics' Institutes are entitled to receive \$2 for every \$1 subscribed for the purchase of any books other than fiction, or for evening class instruction, or both, up to a maximum of \$400 annually. This provision will materially assist the usefulness of these institutions, and encourage those interested in their welfare and success.

In concluding this report, your Committee would congratulate the members of the Institute upon the success which has attended their endeavours to establish it upon a proper footing. They are now in possession of a really good and well selected Library, a commodious and comfortable reading room, and a large and constant supply of the best literature that can be obtained. These inestimable advantages are now placed within the reach of the young men and the industrial classes of the community, and your Committee hope they will be more fully appreciated in the time yet to come. In resigning their trust, your Committee would urge upon the members generally to give their hearty support to the officers and Committee now to be elected. Much yet remains to be done; and surely the consciousness of assisting to improve and elevate the character, and place the priceless blessings of education within the reach of all, is a sufficient incentive to earnest co-operation.

DUNDAS MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		cts.
Balance in hand	126 82	Books bought in accordance with the conditions of Legislative Grant ...	200 00
Members' Subscriptions.....	100 00	Periodicals, Newspapers, &c.....	125 00
Proceeds of Festival.....	134 00	Furnishing, Fuel, Light, &c.....	78 00
Legislative Grant.....	200 00	Expenses of Entertainment.....	59 00
Rent of Rooms.....	50 00	Salaries.....	50 00
		Miscellaneous.....	24 82
		Balance in hand.....	74 00
	610 82		610 82

NOTE.—Members and Subscribers, \$224; Library contains 1,509 volumes, and reading-room 35 periodicals and newspapers. 18 pupils in ornamental drawing class. The members hold a festival annually. Assets, \$1,826.

GALT MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Balance in hand.....	88 66	Books bought in accordance with the conditions of Legislative Grant ...	234
Members' Subscriptions.....	239 32	Books and Periodicals.....	40 64
Proceeds of Lectures, &c.....	162 15	Binding Books.....	34 77
Miscellaneous.....	5 00	Expenses of Lectures.....	32 55
Legislative Grant.....	100 00	Fuel, Light, &c.....	35 20
		Salaries.....	130
		Miscellaneous.....	22
		Balance in hand.....	5
	595 13		595

NOTE.—Members, 155; volumes in Library, 1,365; periodicals and newspapers in reading-room, 40. One lecture, two re-unions, and one penny reading during the year. Clear assets, \$1,915.

GUELPH MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Balance in hand.....	48 09	Books bought in accordance with the conditions of Legislative Grant ...	70 28
Members' Subscriptions.....	250 80	Binding Books, Stationery, &c.....	14 50
Proceeds of Exhibitions.....	232 28	Fuel, Light, &c.....	18 85
		Salaries.....	232 00
		Miscellaneous.....	2 94
		Balance in hand.....	192 60
	<hr/> 531 17		<hr/> 531 17

HAMILTON MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Balance in hand.....	307 80	Books bought in accordance with the conditions of Legislative Grant ...	448 47
Members' Subscriptions.....	1066 05	Books, Magazines, &c.....	237 99
Donations	80 00	Repairs, Fuel, Light, &c.....	1002 09
Rent of Rooms and Hall.....	2568 00	Salaries	600 00
Miscellaneous	141 86	Commission.....	165 44
Legislative Grant.....	200 00	Mortgage.....	900 00
		Miscellaneous	217 99
		Balance in hand.....	791 73
	<hr/> 4363-71		<hr/> 4363 71

NOTE.—This Institute has 525 members; and 2,927 volumes in its Library; and 110 periodicals and newspapers in its reading room. Clear assets estimated at \$14,201.

KINCARDINE MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Balance in hand	30 61	Books bought in accordance with the conditions of Legislative Grant ...	85 00
Members' Subscriptions.....	29 00	Magazines and Newspapers.....	53 00
Proceeds of Readings.....	180 00	Expenses of Readings, &c.....	115 87
Miscellaneous	19 00	Fuel, Light, &c	4 00
		Balance in hand.....	74
	<hr/> 258 61		<hr/> 258 61

NOTE.—Number of members, 38; total volumes in Library, 229; issues during the year, 511, and 12 readings; 17 magazines and reviews in reading-room. Assets, \$350.

LONDON MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Balance in hand.....	350 69	Books bought in accordance with the conditions of Legislative Grant...	100 00
Members' Subscriptions.....	300 00	Magazines, Newspapers, &c.....	76 25
Proceeds of Readings and Music ...	140 00	Expenses of Evening Classes.....	50 00
Rent of Rooms.....	126 00	Repairs, Fuel, Light, &c.....	552 03
Miscellaneous.....	36 18	Expenses of Lectures, &c.....	63 00
		Salaries	100 00
		Miscellaneous	6 25
		Balance in hand	5 34
	<hr/> 952 87		<hr/> 952 87

NOTE.—Members, 302; Library, 1,162 volumes; 22 periodicals in reading-room. Pupils in architectural and mechanical drawing, 63; ornamental drawing, 20; elocution, 40; music, 55; mutual instruction, 25. Five musical and literary entertainments were given, with one exhibition of natural history, all of which were highly interesting and instructive. Assets, \$4,235.

MEAFORD MECHANICS' INSTITUTE.

RECEIPTS		EXPENDITURE.	
	\$ cts.		\$ cts.
Balance in hand.....	11 27	Books bought in accordance with the conditions of Legislative Grant...	93 36
Members' Subscriptions.....	74 00	Binding book, stationery, &c.....	22 49
Fees from Lectures and Concerts ...	98 05	Expenses of Lectures, &c.....	19 71
Excursion.....	31 75	Salaries.....	20 00
Legislative Grant.....	50 00	Organ, paid on.....	30 00
Miscellaneous.....	16 05	Miscellaneous	16 60
		Balance in hand.....	78 96
	<hr/> 281 12		<hr/> 281 12

NOTE.—Members, 116; volumes in Library, 390. During the year, 8 lectures, 9 readings, and 2 concerts were given. Assets, \$459. The lectures, &c., were well attended, and the Library is more generally resorted to, and greater interest is being felt in the progress of the Institute, which seems healthily advancing.

MILTON MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Balance in hand.....	21 90	Books, Magazines, &c.....	50 40
Members' Subscriptions	37 00	Expenses of Lectures.....	38 50
Fees from Lectures.....	63 70	Salaries.....	40 00
Miscellaneous.....	36 21	Miscellaneous	14 59
		Balance in hand	15 32
	<hr/> 158 81		<hr/> 158 81

NOTE.—Members, 74; 725 volumes in Library, and 7 periodicals in reading-room. Three lectures were given, and one musical entertainment. Assets, \$1,050.

MOUNT FOREST MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Balance in hand.....	25 50	Books bought in accordance with the	
Members' Subscriptions.....	32 05	conditions of Legislative Grant ...	53 71
Proceeds of Lectures, &c	18 70	Magazines, &c.....	8 94
Donations	12 00	Expenses of Lectures, &c.....	19 25
Legislative Grant.....	41 88	Miscellaneous	8 69
		Balance in hand.....	39 54
	<hr/> 130 13		<hr/> 130 13

NOTE.—This Institute comprises 34 members, and 213 volumes in the Library. Seven lectures and two readings were given during the year. Assets, \$240.

NIAGARA MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		cts.
Members' Subscriptions.....	95 92	Books purchased in accordance with	
Proceeds of Lectures, &c.....	193 85	the conditions of Legislative Grant	208 00
Balance due Treasurer.....	99 08	Magazines, Newspapers, &c.....	43 75
		Expenses of Lectures, &c.....	110 00
		Salaries.....	20 00
		Fuel, Light, &c.....	6 90
	<hr/> 388 85		<hr/> 388

NOTE.—Members, 45; Library contains 1,119 volumes, which are freely circulated. A concert, one reading, and two lectures were given during the year.

PARIS MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Balance in hand.....	9 00	Books bought in accordance with the	
Members' Subscriptions..	162 00	conditions of Legislative Grant ...	110 48
Fees from Lectures	34 02	Magazines, Newspapers, &c.....	71 85
Donations.....	50 00	Expenses of Lectures.....	25 00
Periodicals sold.....	22 67	Fuel, light, insurance, &c.....	50 23
Legislative Grant.....	100 00	Salaries.....	52 00
Miscellaneous	4 00	Arrears, &c.....	49 73
		Balance in hand.....	21 40
	<hr/> 381 69		<hr/> 381 69

NOTE.—Members, 106; 1,155 volumes in library; circulation of books increasing; 24 periodicals and newspapers in the reading-room. Two public lectures were given, besides one literary entertainment, all of which elicited much interest. Assets estimated at \$2,158. The Institute is making steady progress.

PETERBORO' MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		cts.
Balance in hand.....	34 64	Books purchased in accordance with the conditions of Legislative Grant	400 00
Members' Subscriptions	65 25	Magazines, Newspapers, &c.....	62 40
Fees from Lectures.....	35 20	Expenses for Lectures	40 20
Donations.....	180 00	Salaries	24 00
Town Council.....	50 00	Rent, Fuel, Light, &c	91 37
Legislative Grant.....	200 00	Miscellaneous	22 73
Miscellaneous.....	79 88	Balance in hand.....	4 27
	<u>644 97</u>		<u>644 97</u>

NOTE.—Number of members, 106; 556 volumes in the Library, and 42 periodicals in reading room, which is much frequented. Mr. Dixon gave three lectures on the dignity of labour, and the effects of war, which were highly appreciated. Assets estimated at \$1,200. "An effort has been made by the Toronto Institute to induce those for whom these Institutes are more especially intended to take greater interest in them, and it is to be regretted that the mechanics of Peterborough have not taken the interest in this Institute that might have been expected; but from the increased number of such on the membership of the present year, it is to be hoped that they will begin to appreciate the advantages that the Institute holds forth at so cheap a rate."

PORT ELGIN MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Members' Subscriptions.....	53 25	Books bought in accordance with the conditions of Legislative Grant...	113 35
Donations.....	100 00	Books, Magazines, &c.....	109 39
Proceeds of sale of Periodicals	6 32	Rent	19 50
Legislative Grant.....	100 00	Miscellaneous	12 04
	<u>259 57</u>	Balance in hand.....	5 29
			<u>259 57</u>

NOTE.—Members, 84; in Library, 375 volumes, and 12 magazines and newspapers in reading room.

RENFREW MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$
Members' Subscriptions..	47 72	Books bought in accordance with the conditions of Legislative Grant...	35 09
Donations.....	25 89	Books and Magazines.....	26 25
	<u>73 61</u>	Salaries	12 27
			<u>73 61</u>

NOTE.—Members, 50; in Library, 564 volumes.

RICHMOND HILL MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Members' subscriptions.....	63 00	Books bought in accordance with the conditions of Legislative Grant...	52 68
Proceeds of Lectures, &c.....	103 18	Books, Periodicals, &c.....	35 00
Loan.....	150 35	Expenses of Lectures, &c.....	13 30
Legislative Grant.....	52 68	Rent and fittings up.....	237 05
		Miscellaneous.....	31 18
	<hr/>		<hr/>
	369 21		369 21

NOTE.—Members, 67; 138 vols. in Library; 21 Periodicals in Reading Room; 3 Lectures and 3 Re-unions were given during the year, and one Exhibition of Chemical Experiments; Assets, \$286.

SEAFORTH MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Balance in hand.....	20 59	Binding Books, Stationery, &c.....	37 75
Members' Subscriptions.....	38 70	Expenses of Lectures.....	10 00
Proceeds of Lectures.....	12 60	Insurance.....	17 69
		Balance in hand.....	6 45
	<hr/>		<hr/>
	71 89		71 89

NOTE.—Number of Members, 139; Library contains 452 volumes; 2 Lectures given during the year; Assets, estimate \$447.

SMITH'S FALLS MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Balance in hand.....	87 87	Books bought in accordance with the conditions of Legislative Grant...	113 00
Members' Subscriptions.....	55 15	Books and Periodicals.....	34 18
Proceeds of Readings.....	62 70	Salaries.....	25 00
Legislative Grant.....	57 00	Balance in hand.....	90 54
	<hr/>		<hr/>
	262 72		262 72

NOTE.—Members, 61; Library contains 1,553 volumes; 8 Readings given during the year; Assets, estimated at \$2,147.

STRATFORD MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Balance in hand.....	2 32	Books bought in accordance with the conditions of Legislative Grant...	125 45
Members' Subscriptions.....	97 00	Books and Periodicals.....	56 64
Legislative Grant.....	119 50	Salaries.....	17 95
Miscellaneous.....	12 00	Miscellaneous.....	20 14
		Balance in hand.....	10 64
	<hr/>		<hr/>
	230 82		230 82

NOTE.—This Institute had 97 members, and 1,191 volumes in its Library.

STREETSVILLE MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Members' Subscriptions.....	96 48	Balance due Treasurer...	38 93
Legislative Grant.....	200 00	Books bought in accordance with	
Balance due Treasurer.....	55 45	conditions of Legislative Grant...	202 75
		Books and Periodicals	63 25
		Salaries	30 00
		Miscellaneous.....	17 00
	<hr/> 351 93		<hr/> 351 93

NOTE.—Members, 53; Library, 953 volumes; periodicals in the reading-room, 4. Four lectures during the year. Assets, \$1,067.

THOROLD MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		cts.
Balance in hand.....	63 51	Books bought in accordance with the	
Members' Subscriptions.....	74 00	conditions of Legislative Grant...	216 81
Proceeds from Lectures and enter-		Books, Periodicals, &c.....	27 37
tainments.....	339 66	Expenses of Lectures, &c	151 47
Legislative Grant.....	100 00	Salaries	22 00
Miscellaneous.....	2 00	Fuel, Light, Insurance, &c	30 20
	<hr/> 579 17	Balance in hand	131 32
			<hr/> 579 17

NOTE.—Members, 74; volumes in Library, 1,000. 12 Lectures and entertainments, and one excursion were given. Assets, \$1,181.

EXTRACTS FROM REPORT.

Your Committee have much pleasure in presenting their report for the year ending May 31st, 1871, a year which has been marked by a general prosperity of the Institute.

By means of an excursion, entertainments, lectures and subscriptions, a large sum has been raised for Institute purposes.

Your Committee have much pleasure in being able to state that an appropriation of \$100 for the purchase of books under the Act, has been made, which, together with the grant, has been expended for books. It is gratifying also to know that the number of volumes in the Library has been increased from 700 to 1,000.

Your Committee are of the opinion that by a general canvassing of the town a large additional number of subscribers might be added to the list of members.

In view of the above, it is to be hoped that the unusual prosperity which has attended the Institute in the past will keep on increasing, and that for years to come we shall be able to make large additions to our now large and well selected Library.

TORONTO MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Members' Subscriptions.....	1754 80	Balance due late Treasurer	198 92
Legislative Grant.....	200 00	Books bought in accordance with the	
Donations	120 00	conditions of Legislative Grant...	89 00
Rents of Rooms.....	4002 72	Expenditure on Evening Classes....	713 17
Fees from Class Pupils	624 80	Books and Periodicals.....	396 32
Proceeds of Lectures &c.....	287 25	Binding Books, Stationery, &c.....	441 93
Miscellaneous	138 47	Fuel, Light, &c	1713 69
Balance due Treasurer.	136 79	Repairs, Insurance, &c.....	410 02
		Expenses of Reading, &c.....	64 72
		Salaries.....	1538 31
		Interest	1001 14
		Miscellaneous	34 09
		Bills payable.....	600 00
		Balance in hand	63 52
	7264 83		7264 83

NOTE.—Members, 963 ; books in Library, 7,819 ; periodicals and newspapers in reading room 111 ; lectures and readings during the year 7. Net assets estimated at \$38,075.

EXTRACTS FROM REPORT.

Library and Reading-room.

Your Directors have done as much as lay in their power to keep the library and reading room in an efficient state. The thanks of the Institute are due to a large number of publishers for their liberality in continuing to furnish the reading-room with their periodicals, free of charge.

The number of books in the library at the date of the last annual report was	7,794
Added during the year	261
Bound up from the reading room.	48
	8,103
Lost and worn out during the year	284
Present total	7,819

	Vols. in Library.		Issued.	
	1870.	1871.	1870.	1871.
Biography.....	613	620	882	600
History.....	773	760	892	590
Miscellaneous	617	640	1,074	955
Fiction.....	2,302	2,228	16,226	15,987
Poetry and the drama.....	259	250	600	480
Periodical literature	1,212	1,280	2,968	2,640
Science and art.....	612	620	720	669
Religious literature	184	181	268	189
Voyages and travels	520	530	934	870
Illustrated works	234	240	...	...
Library of reference	468	470	...	...
Total	7,794	7,819	24,564	22,980
	252			

Evening Classes.

The classes during the year have been conducted with their usual efficiency. There has however, been a decrease of 106 in the number of pupils attending the classes, and of \$126.60 in the receipts arising therefrom, not including the grant from the Northern Railway Company.

Amount from pupils &c.....	\$625 60
Amount paid Teachers, &c.....	550 18

Showing a gain to the Institute..... \$75 42

Your directors, believing it their duty to continue this very important department, would strongly urge upon their successors the propriety of keeping the fees of the pupils as low as possible, so as to afford persons of limited means every facility for improvement.

Number of Pupils

	1869-70.	1870-71.
Book-keeping and penmanship, Mr. Samuel Clare.....	107	61
Arithmetic and mathematics, Mr. Samuel McAlister.....	44	37
Architectural and mechanical drawing, Mr. William Gemmel.....	37	28
Ornamental drawing, Mr. R. Baigent.....	37	24
French, Mons. E. Pernet..	26	30
English grammar and composition, Mr. Richard Lewis..	38	23
Chemistry, Dr. May.....	12	...
Elocution, Mr. Richard Lewis ..	25	17
	326	220

The usual examinations were held, and the distribution of prizes awarded to successful pupils took place on the 19th April. Hon. Geo. Brown presided, and together with Prof. Wilson, Dr. Cannon, and Prof. Buckland. presented the prizes. Once more the directors have to acknowledge the continued liberality of the Northern Railway Company of Canada, and the generous support extended by its managing director, Mr. Cumberland, to the institution.

Lectures and Entertainments.

During the year, with a view of introducing popular scientific lectures, Dr. Machattie, of London, delivered two lectures.

Mr. George Vandenhoff, the popular reader of New York, gave three readings under the auspices of the Institute.

The receipts from entertainments were.....	\$287 25
Expenditure	128 87

Showing a gain of..... \$159 38

If it is considered desirable to have a series of lectures under the auspices of the Institute, it will become necessary to affiliate with the Lecture Bureau of the Western and Eastern States, as nearly all public lecturers are members of one or other of these associations.

Conclusion.

Your directors have long felt that it was highly desirable that the mechanics of this city should take a much warmer interest in the management of this Institute than they have done, and with this object in view circulars were issued, inviting delegates from the various workshops and factories to meet your Board for consultation. The meeting was held in the lecture-room, on Saturday, the 22nd April, and your Board are gratified to be able to report that they have every reason to believe that the object they had in view will yet be accomplished.

Your directors would also strongly urge upon their successors the advisability of taking some decided action towards the reduction of the debt before entering upon any new enterprise.

 WOODSTOCK MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ cts.		\$ cts.
Members' Subscriptions.....	136 00	Books bought in accordance with the	
Fees from Class Pupils.....	67 00	conditions of Legislative Grant...	211 02
Donations	67 00	Expenses of Evening Classes.....	101 24
Legislative Grant.....	142 50	Books and Periodicals.....	71 85
Miscellaneous	3 97	Expenses Entertainments.....	13 00
		Fuel, Light, Insurance.....	19 36
	<hr/>		<hr/>
	416 47		416 47

NOTE.—Members, 156; books in Library, 1,316; evening classes, book-keeping, and penmanship, 28 pupils; arithmetic and mathematics, 18; English grammar and composition, 14. Assets, \$950.

APPENDIX TO REPORT

OF THE

Commissioner of Agriculture and Arts.

APPENDIX (D).

REPORT OF THE FRUIT GROWERS' ASSOCIATION OF ONTARIO
FOR THE YEAR 1871.

APPENDIX TO REPORT

OF THE

Commissioner of Agriculture and Arts.

APPENDIX (D).

REPORT OF THE FRUIT GROWERS' ASSOCIATION OF ONTARIO
FOR 1871.

To the Honourable the Commissioner of Agriculture.

SIR,—In submitting for your consideration the Report of the Fruit Growers' Association for the year 1871, I may state that the interest manifested in its meetings for discussion, as evinced by the attendance of members on those occasions, and their participation therein, has been well sustained during the past year, and that the Association has commanded an increased share of public attention. The work of supplying its members with trees and plants of such fruits of recent introduction as give promise of being desirable acquisitions to the fruits of the Province, has been continued during the past year, and has been a marked means of calling the attention of the public to the operations of this Society, and to the cultivation and testing of fruits. The prizes that have been offered for the introduction of seedling fruits of Canadian origin have been productive already of some benefit, numerous samples having been sent in to the committee charged with the labour of examining such fruits and of ascertaining their merits, some of which are likely to prove to be very valuable acquisitions. The usual reports of the discussions had at the several meetings held in February, July and September, are embodied in this Report, together with the proceedings of the annual meeting, the President's most excellent and instructive address, and such other papers and information as the Association has been able to obtain. Our membership is now about eight hundred, and is continually increasing.

I have the honour to remain,

Your obedient servant,

D. W. BEADLE,

Secretary of the Fruit Growers' Association.

St. Catharines, Nov. 13th, 1871.

ANNUAL MEETING.

The annual meeting was held in the City Hall, Kingston, on Tuesday evening, September 25th, 1871.

The President being absent, the Vice-President, J. C. Rykert, M.P.P., took the chair. The minutes of last meeting were read and approved.

The Treasurer read his annual report, shewing the receipts and disbursements for the past year.

The President's annual address was read by the Secretary. It was listened to with much interest, and on motion of Mr. Saunders, the thanks of the meeting were voted to the President therefor, and the manuscript referred to the Committee on Printing for publication.

The election of officers for the ensuing year was then held, which resulted as follows, namely:—

President—Rev. R. Burnet, Hamilton.

Vice-President—J. C. Rykert, M.P.P., St. Catharines.

Secretary-Treasurer—D. W. Beadle, Esq., St. Catharines.

Directors—Messrs. John Gray and Geo. Leslie, Jr., Toronto; J. A. Allen, Kingston; W. Holton and W. H. Mills, Hamilton; A. B. Bennett, Brantford; W. Saunders, London; D. Caldwell, Galt; C. Arnold, Paris.

Auditors—W. L. Copeland and W. J. McCalla, St. Catharines.

DIRECTORS' REPORT.

The Directors feel much gratification in being able to report the continued growth and prosperity of the Association. Since their last report three meetings have been held for discussions and exhibition of fruit, at Hamilton, in February and July, and at Goderich in September. The meeting at Goderich was well attended, and the display of fruits of unusual excellence. It was very evident from the appearance of the fruit shown from Goderich and vicinity, that this part of the Province is very favourable to the production of fine fruits, and the members returned from this meeting more favourably impressed than ever with the fine fruit producing capabilities of our Province. The Directors trust that invitations will be received and accepted for the holding of one or more of the regular meetings the coming year, in other remote parts of the Province, fully believing that the holding of such meetings is of great benefit both in awakening a deeper interest in fruit culture among the residents of that particular neighbourhood, and in bringing the fruit growers in all parts of the Province into closer relations with each other.

The Association distributed among its members, during the past spring, a tree of the Beurré d'Anjou Pear, and a plant of the Early Wilson Blackberry, and of the Mammoth Cluster Raspberry, with the understanding that the recipients are to report to the Secretary the success or failure of the same in their several localities. By this means we shall soon ascertain the value of these fruits in the greater part of the Province, which knowledge will be of great importance to future planters. Already the Eumelan Grape, distributed in 1870 to the members of the Association, has in a few instances shown fruit, and very soon we will know whether it is a desirable grape for general cultivation in the Province. We have directed the Secretary to supply all the members whose trees and plants failed to reach them last spring, or who became members since their distribution, with the same next season; and to replace those that have died, so far as he may be able to ascertain their loss.

The Directors have not yet decided what they will distribute among the members in 1872, but the President has suggested, and strongly recommended that we distribute a work now in preparation by our Secretary, entitled the "Canadian Fruit, Flower and Kitchen Gardener," designed to be a guide to Canadian cultivators in all matters relating to the cultivation of fruits, flowers and vegetables. The question is laid over until a future meeting, when it is hoped we will be able to see a considerable portion, if not the whole, of the work, and decide upon the propriety of acting upon the President's recommendation.

During the past winter a barrel, containing forty varieties of apples, was sent by us to the Fruit Grower's Association of Nova Scotia, which was received by them in good order. The correspondence relating thereto, will be embodied in full, in the Annual Report to Government.

The request for scions made by our friends in Nova Scotia, has been most gladly complied with to the extent of our ability at the time, and we hope to be able to furnish them with anything they may want.

We have also directed the Secretary to send scions to persons residing in the colder sec-

tions of the country, who will agree to care for the same, and make a full report to the Secretary of the adaptation of the varieties that may be sent to them to the climate of that locality.

We have thought it would contribute towards the diffusion of much-needed information in regard to the culture of fruit in different sections, if an examination could be made by competent persons, and a report be prepared by them, setting forth what they had seen. In the hope of accomplishing something in this direction, we appointed four separate committees, charged with the duty of making a personal examination of the several districts assigned to them, with instructions to report in writing the nature of the country, the character of its soil, and its capabilities for the production of fruit, its peculiar advantages and disadvantages for such culture, its present fruit productions, and such other matters affecting fruit growing therein as might be suggested to them and thought worthy of attention. The districts selected were the country from Windsor to Amherstburgh and Morpeth, assigned to Messrs. Burnet, Dougall and Mills; the County of Elgin, assigned to Messrs. Saunders, Bennett and Beadle; the vicinity of Brantford, assigned to Messrs. Holton and Arnold; and the territory comprised within a radius of fifteen miles around Toronto, assigned to Messrs. Boulton and Leslie. The reports that may be received from these Committees will be printed in the annual report.

We have authorized the Committee on seedling fruits, if they shall deem any of the seedlings that may be submitted to them during the year to be worthy of a gratuity, to award a sum not exceeding ten dollars to the person exhibiting the best seedling fruit of its kind during the year, and that the certificate of the Committee shall be authority to the Treasurer to pay the same. This is a special award, and is not to exclude the recipient from competing for the prizes heretofore offered, or that may hereafter be offered, for seedling fruits; nor is the award of such gratuity for one kind of fruit (as, for instance, if awarded to seedling apples,) to disqualify the recipient from receiving a like award for another kind of seedling fruit, such as pears, plums, grapes, and the like.

The Directors offer the following prizes for the year 1872:

First. An HONORARY MEDAL to the originator of any new fruit which, having been thoroughly tested, is found to be worthy of being placed among the fruits of its class for cultivation in Ontario.

Second. The sum of FIFTY DOLLARS for the best new Canadian seedling late winter apple.

THIRTY DOLLARS for the best Canadian seedling harvest apple.

TWENTY DOLLARS for the best Canadian seedling autumn apple.

All these to be at least equal to the old popular varieties now in cultivation. Not less than two dozen specimens of the fruit must be sent, when in condition for examination, to the President of the Association, Rev. R. Burnet, Hamilton, accompanied by a letter setting forth what, in the opinion of the sender, are the excellencies of the fruit sent, whether for cooking, or for the dessert, &c., &c.; also stating the origin of the tree, if known, its vigour, hardiness, productiveness, and the like.

Third. The sum of TWENTY-FIVE DOLLARS for the best essay on the cultivation of the plum, including a short description of the varieties which the writer has grown, and his opinion on the merits of each.

FIFTEEN DOLLARS for the second best essay thereon.

Fourth. The sum of TWENTY-FIVE DOLLARS for the best essay on mildew of the gooseberry and the Grape, with drawings of the appearances of the mildew in several stages of development as seen under the microscope by the writer.

FIFTEEN DOLLARS for the second best essay thereon. Each essay must be forwarded to the Secretary, D. W. Beadle, St. Catharines, on or before, the fifteenth day of September, 1872, and bear a motto, and be accompanied with a sealed note having the same motto indorsed on the outside, and containing within the name of the author of the essay.

Fifth. To any person sending to Wm. Saunders, Esq., London, transportation prepaid, five thousand of the Plum Curculio, (*Conotrachelus Nemuphar*) in the beetle state, the sum of TWENTY DOLLARS; or sending three thousand, the sum of TEN DOLLARS; or sending two thousand, the sum of FIVE DOLLARS. The Treasurer will pay these sums to any person furnishing him with a certificate from Mr. Saunders, stating that he is entitled thereto.

We have also decided to illustrate our Report for 1871, with an engraving of all the fruits that have been disseminated by the Association, in order that the members may have

these to compare with the fruits that their plants may produce. In addition to these we have ordered one thousand lithograph drawings of the Red Astracan Apple, neatly and truthfully coloured by hand, to be placed in as many copies of the Report, which will be distributed among the members of the Association. We have selected the Red Astracan for this purpose because of its many excellent qualities, and its adaptation to the climate of all parts of our Province. It seems desirable that this feature of the reports should be continued and that a truthful coloured drawing of some particularly valuable fruit, should accompany each annual report, thus in the course of time placing in the hands of the members a collection of accurate coloured illustrations of our most valuable fruits.

All of which is respectfully submitted,

R. BURNET, *President.*

D. W. BEADLE, *Secretary.*

AUDITORS' REPORT.

Abstract of Treasurer's Account for years 1869 and 1870.

RECEIPTS.

To cash in treasury from last year.	\$318 64
“ Members' fees for the year.....	394 00
“ Government Grant.....	350 00
	<hr/>
	1062 64

EXPENDITURE.

By Printing, as per vouchers.....	\$35 50
“ Amount paid Charles Arnold, Expenses to Philadelphia...	51 00
“ “ D Nichol, Essay on Small Fruit	15 00
“ “ Postages and Envelopes	35 11
“ “ Wm. Saunders, Prize Essay.....	30 00
“ “ “ Postage, &c.....	75
“ “ Geo. Groves, as per account.....	12 50
“ “ F. Trowbridge, for Oil'd Paper.....	3 20
“ “ Beadle and Buchanan	18 00
“ “ For Emanuel Grape Vines.....	234 07
“ “ Duty on “ “	49 99
“ “ Express Charges “	50
“ “ London Gas Bill	1 60
“ “ For Engrossing Petition to Parliament.....	50
“ “ Discount on Silver.....	30
“ “ Express Charges	35
“ “ Duty and Express Charges on Oil'd Paper...	1 00
“ “ For Taggs for Grape Vines.....	1 20
“ “ Curculio Premiums as per vouchers.....	105 00
“ “ Secretary's Expenses attending Meetings....	15 80
“ “ W. P. Mills' account	4 00
“ “ Rev. R. Burnet's “	9 80
“ “ J. Dougall “	31 70
“ “ A. Morse “	5 06
“ “ R. N. Ball “	9 25
“ “ Wm. Saunders “	5 18
“ “ Geo. Lesslie “	8 25
“ “ Secretary-Treasurer's Salary..	100 00
By Balance Cash in Treasurer's hands.....	277 23

\$1062 64

We, the undersigned, have examined the books and accounts of the Treasurer of the Fruit Growers' Association, and found everything correct. We certify that the foregoing is a correct statement, both receipts and disbursements having been compared with vouchers. In addition to the balance of \$227.23 in Treasurer's hands, there is still the special deposit of \$350 in N. D. Bank.

W. J. McCALLA, }
W. L. COPELAND, } *Auditors.*

TREASURER'S REPORT.

1870, Oct. 4.—Balance in treasury.....	\$277 23
Members Fees since 4th October, 1870.....	760 00
Refunded by Collector of Customs.....	12 50
Government Grant, 5th September, 1871.....	500 00
Total Receipts	\$1549 73
1871, 23rd Sept.—Total expenditures to date	1007 07
Balance in hand	\$542 66

NOTE.—There are several items which have been ordered to be paid by the Directors, that have not yet been presented to the Treasurer, and which, when paid, will reduce the actual balance to the credit of the Association to about three hundred dollars.

PRESIDENT'S ADDRESS.

Another Horticultural year has terminated, and finds the members of the Fruit Growers' Association assembled in annual meeting. Provision has been made that your President should deliver the usual address, and present some subjects of interest that may have engaged attention during the past season. Allow me, at the outset to tender to the members, present and absent, my sincere and hearty thanks for having placed me in this chair, and for the uniform urbanity and kindness which have marked all their conduct towards me during my presidency, and to assure them of the feelings of gratitude and satisfaction with which I shall ever look back to the friendly and interesting intercourse which has existed during the whole period of our official connection. The past season has been one of great interest to the fruit grower in many ways. Exceptional in point of weather, it has been productive of many important lessons to the Horticulturist. The extreme drought has tested many of our choice varieties of fruits, and has been the means of affording criteria of rare value in regard to sorts of which we had not much information, and which it was needful to have tried by extremes in the weather. The advancement of our Association in membership, activity, and substantial progress has been all that could be desired. Indeed, the means employed for the good of the Association have been singularly beneficial in their results. The dissemination of the fruit reports, discussions and essays, have created an interest in the public mind which begins to render our contemplated objects second only to the agricultural interests of our Province.

The systematic and admirable report of the Entomological Society which was presented to the Bureau of Agriculture has made an impression on the general public, and on fruit growers in particular, which has given a mighty impulse to our special cultivation. I have only to utter the heartfelt wish, that the very intimate and close relationship at present subsisting between the members of that society and our own may be perpetual and that our only rivalry may be to advance our common interests to the best of our ability.

The plan of making the whole Province an experimental garden for the test of old and new fruits has been followed by the most happy results. It has not only been the means of creating more than usual interest among the members, furnishing important data as to the capabilities of soil, and the variations of climate, but has nearly doubled the membership. Such beneficial results could scarcely have been anticipated, and they surely indicate a road to further advancement in the same direction. If we mistake not the true interests of our Association, and discern the best mode for their accomplishment, we would say, let us continue in this path on which we have so auspiciously entered. We are vain enough to believe that we

wisely suggested the use of another important lever to effect our purposes when proposing recently to our Directors that Secretary Beadle's work on Horticulture should be sown broadcast among our members by the Association during the coming year. It would crown the work already begun in the distribution of plants, give an impetus to fruit culture, and, on account of its Canadian origin and adaptation to our wants, supply at present a hiatus in fruit and vegetable growing which is patent to all lovers of our associated interests. The different local meetings throughout the year have been well attended, and have not lacked in interest—indeed the interest in fruitgrowing has been deeper and more felt than ever before. At Goderich, the display of fruit was something wonderful, and that district of country, at no distant day, is destined to take an important place among fruit growers. The plums, grapes, and apples grown in that locality startled members unacquainted with its capabilities. The benefits accruing to the Association from various local meetings throughout the Province ought not to be lost sight of. I could personally testify, were it needful,—and the members present could add their testimony to mine,—of the interest thereby created in many minds, and of plans formed for the cultivation of fruit: interest and plans which would never have had existence but for the presence of the Association. Among all the interests, however, which the members of our Association are banded together to further, there is none at present so important, and in the future will be so profitable to the fruit culturist, as grape growing. It needs not much discrimination to perceive that this culture is to prove of immense benefit to large tracts of our country. The soil, aspect, and climate of many portions of our large Province around our lakes are singularly adapted for grape-growing. When the late Mr. Underhill, of Albany, was recently among us, he pronounced the western shore of Lake Ontario as one of the best for this culture. He expressed his astonishment at its capabilities, and wondered that so little had been done in the way of developing our resources. What is true with regard to the western shore of Ontario is equally true, after trial, of the north-western, and more than true of the northern shore of Lake Erie and the north-eastern of Lake Huron. The most sceptical on this latter point must have had their scepticism removed at the late meeting of the Association at Goderich. The adaptability of soil and climate being taken for granted, nay, demonstrated by experiment, the half of the vine-grower's battle is more than fought, and there is only need of the helping hand of our Association, to develop the capabilities of soil, and the amenities of our climate, to make our available districts famous, like a land of old, for its vineyards. If the practical experience of your President is of any use in fastening the initial step of the ladder, it is heartily at your disposal. His experience is only to be taken for what it is worth, and those who know better and more, must just step forward to the front and give us their experience and light. I have fruited one and twenty varieties of grapes, and know more or less of ten varieties more. I am to speak therefore, only of what I know. The Isabella and Catawba were the first I fruited, and I was enamoured at my success with the former. During the fourteen years' cultivation of the Catawba, I succeeded in twice securing ripe fruit, and only twice. I question if we have yet a better wine grape than the Isabella. For hardiness and fruitfulness it can scarcely be excelled. With the exception of the Clinton and Concord it has as yet no equal as a wine-maker. The Catawba we have been compelled to discard. The Hartford Prolific, and Delaware, Concord, and Creveling, were our next addition. The Hartford Prolific has a place in all collections simply on account of its earliness. We esteem it but a poor grape. The Delaware is hard to beat. It is a favourite both for wine-making and dessert. We might with truth say that it is a universal favourite. Vineyardists and amateurs alike find it a profitable variety for cultivation. A grower near Hamilton last year sold his Delaware on the ground for six cents per lb. The wine from the Delaware has always seemed to me more agreeable than that from any other hardy grape which I have tasted. The Clinton and Concord are ranked together. There are no better grapes yet grown for profit. The Clinton is profuse in its bearing, and the Concord does not lack the same character. The Clinton with me does best on the arbour. I have tried in both ways. Indeed, it scarcely pays to cultivate it on the trellis alone. Immense success has attended its culture at Cooksville, Hamilton, St. Catharines, and on Lake Erie shore. It is thoroughly hardy, and while I have seen in my garden, during certain trying winters, the Delaware and Iona a little the worse of the severity, I have not yet seen the Clinton the least scorched. The Concord it what may justly be called a standard hardy grape. In point of bearing qualities, we venture to affirm that it has no equal. It is emphatically a heavy cropper, with fair, beautiful, large fruit, better for

wine making than the table, yet not to be despised for dessert. The wine from this grape has perhaps, at present, the highest commercial value of any variety grown. It ought to rank among the varieties grown by the vineyardist who cultivates for profit. We question if there be a more profitable variety cultivated. It does well trained on the trellis, and needs only ordinary care, and good manuring for the production of a prolific crop. The Creveling is one of the best sorts for dessert. Few varieties excel it in flavour, and as a wine-grape it stands among the best, if not the very best. We have tasted wine two years' old from this grape, and we found it excellent. A drawback to its cultivation is that the berries are sparse on the bunch. This characteristic has appeared in my cultivation and among some of my neighbours, but with others the characteristic is altogether the other way. At the recent Horticultural Show at Hamilton, Mr. Buchanan, of St. Catharines, declared that he had never seen such bunches of Creveling as were grown within a stone's throw of my garden. While it is in general a sparse bearer, the superior flavour of the fruit, its beautiful bloom, and fair size of berry, will always render it a favourite variety of cultivation. Arnold's varieties come next for observation, viz.—Othello, Autuchon, Canada, and Cornucopia. Othello is, to our taste, a little too acid; Ellwanger & Barry, of Rochester, N. Y., say that it is sprightly. The bunches are handsome, the berries fair, but we esteem it inferior to several of Rogers' hybrids. The Canada and Cornucopia are good varieties. Canada is really a finely flavoured grape. Arnold's No. 8. and his Canada, are our favourites in point of flavour of all his hybrids. His Autuchon is not much, if anything, behind the former two; it is a white grape, pretty compact in the bunch, and of fair size in berry. It is unfortunate for Mr. Arnold's reputation, that his friend and collaborator in hybridization, Mr. Rogers, is in the same field which he has been cultivating, and that Rogers varieties have got both the ear, and the taste, we presume, of the public. We must not overlook, in any remarks on the culture of the grape, the prominent share Mr. Arnold has had in giving a lift to grape growing by his hybridization, and grape culture in general. I know too little of Mr. Reeds' hybrids to speak emphatically of their character, and merely notice that for several years he has shown some beautiful hybrids, both at the Fruit Growers' Association meetings, and also at the Provincial Exhibition. We also cultivate the Adirondac, Eumelan, Israella, Iona, Diana, Ives' seedling, Rogers' No. 1, 3, 4, 15, 19, 33, 41, 42, 53, and can speak of these varieties in the highest terms. We are deeply impressed with the thought that for various reasons Rogers' varieties will carry the palm over all other varieties. The berries of all his varieties range from medium to very large. And to those of us who know the marketing propensities of our wives and daughters, in always choosing large bunches and large berries, there can be no surprise at the popularity of Rogers' varieties. They all have very similar characteristics,—rampant growers, fair fruiterers, and excellent flavour. No. 15 has the repute of being like the Creveling, a sparse bearer. This is a mistake. When young, and in certain localities, this drawback may mark its growth, but it does not when properly cultivated. Grape-growers, we fear, have been too much in the habit of too closely cutting and pruning Rogers' varieties. From their mode of growth they require to be allowed to run, with plenty of room, light and air. Their bunches will then be astonishingly large, and this can be truly said of No. 15. No. 3, to our taste, is a superb grape, amber-coloured, or as Rogers terms it, red-coloured. It is conspicuous for the beauty of its berry, and is a fine addition to the dessert table. It, too, is a free grower, and must not be curbed in its tendencies. Nos. 1, 4, 19 and 33 are similar in character and flavour. The skin of 19 is thicker considerably than that of Nos. 41 and 42. No. 19 is in all respects a desirable grape; so is No. 4; it was long my favourite. Indeed, No. 4 cannot be too highly spoken of. The bunches have large compact berries, and the berry itself is of exquisite flavour. No. 4 is one of Rogers' best varieties and does well in our neighbourhood. All the above mentioned varieties, however, must yield the palm to Nos. 53, 42 and 41, and of these 41 is the best. The Salem, No. 53, is an old favourite, but it must give place to No. 41, which we believe stands highest of all Rogers' varieties with which we are acquainted. No. 42 follows at no inconsiderable distance. These latter varieties, like those formerly noticed, require to be allowed to run. Mr. Kilborn, of Beamsville, on a rich bottom, allows his Rogers' varieties to bear without stakes, just trailing on the ground. We can safely say we have seen no such fruit trained on the old fashion in any vineyard. Mr. John Freed, of Hamilton, raises them about two feet only from the ground, by branch stakes. He gets wonderful crops, and beautiful fruit, both in quantity and quality. This low mode of cultivation is yet destined to take a prominent place in our country, and

notwithstanding the drawback of sand, and rainy seasons, will yet come into general practice. We have not yet said our all on Rogers' varieties, until we say that we cannot speak of the wine making qualities of his grapes, never having made any and never having tested the wine from any of his varieties. For market and for table use we fearlessly affirm that they will carry the palm over all others. The best of Rogers' which we know are classed thus in the order of merit: Nos. 41, 42, 53, 4, 19, 1, 33, 3, 15. We notice that No. 42 is classed as amber-coloured by nurserymen: with us it is almost a black grape, with an amethyst tinge, and of very superior excellence. No. 41 comes nearest to the flavour of a hot-house grape than any other hardy grape which we have cultivated. Israella and Iona, the one a black and the other a red grape, are well worthy of cultivation; when fully ripened, and the bunches well-developed, they are both superb grapes; highly flavoured, and at the same time delicate, they leave, when eaten, no harsh, tartar flavour in the mouth. One or two of Rogers' varieties do this. The tongue, after eating them, smarts with an acrid flavour. The Israella and Iona are entirely free from this quality. Wine from the Israella is good, really good, and fine flavoured, with a nice bouquet. Ives' seedling and the Eumelan promise well at Hamilton and in the neighbouring locality,—the former is one of the best wine grapes. Mr. William Haskins, of Hamilton, has some experience of the Alvey, and gives it a foremost character for its wine qualities: the bunches are fair, berries very compact, and, if it ripen with us a little before the Isabella, will suit well for general cultivation. Norton's Virginia, which Missouri growers have thought would ripen in our northern latitudes, matures well in the locality around here; it does well at Niagara, and probably after further trial may do well throughout the more favoured vine-growing districts of the country. The Eumelan is certainly a nice grape; fanciers, however, are already beginning to complain that the berries are small. We can testify that the wine made from it is excellent. The general trial which it is getting, from the Eastern Townships to Windsor, will soon be productive of valuable results. From general experience alone can a knowledge of the worth and properties of fruits be obtained. The "To Kalon" is to be found in a number of collections—in and around Hamilton its reputation is good; but I know too little of it for me to speak in any way dogmatically. The Rebecca is a delicious grape, and arrives at great perfection in this quarter, but it is better suited for the garden than the vineyard. It is highly flavoured, bears well, a slender grower, but quite hardy. The Allen's Hybrid bears fine fruit, but is scarcely worth cultivation. It mildews worse than any other known variety, although we have seen some beautiful unmildewed bunches matured from it when allowed to grovel in the grass and dirt without being tied up. The Walter has fruited with us, and is a superior grape. We have tasted wine made from this grape, and can pronounce upon its excellent quality. It ripens early, and is likely to prove a good variety of early hardy grape with us. It may be considered a companion grape to the Eumelan. This list must be brought to a conclusion with a brief notice of the Diana Hamburgh. Mr. Murray, of Bruce & Murray, of Hamilton, gave us a bunch of this variety a fortnight ago. We have never tasted a more delicious hardy grape. It has many of the characteristics of the Black Hamburgh, and if it sustains the excellence we found it to possess this season, it will shortly prove an immense favourite among grape-growers. It ripens at the same time as the Creveling, Rogers' 15, &c., &c. We cannot speak from our own experience in grape-growing of the disease and insect pests peculiar to the vine. The most prevalent disease on my vine is the mildew. I recently, through the kindness of Mr. Whitton, our Hamilton premier microscopist, examined this mildew, and found it a plant, luxuriating in the richness of the vine, and bearing seed-vessels abundantly, which, to our vision, were in process of disseminating their abundant spores in all directions. Capsules were found in the section of the skin, and the rootlets of the plant had found their way into the pulp of the berry. Husmann, I observe, imagines that mildew is a fungus. It is a fungus, and something more, it is one of the most beautiful, though destructive plants, which I ever saw. Might it not be well for our Association to offer a prize on the microscopic appearances of mildew? It might assist horticulturists, and tend, perhaps, to settle the conflicting opinions entertained of this pest. The recent notion that vines take up the spores of the parasite from the oleaginous manures applied to the roots through their spongiales, and that they find their development in and on the fruit, may be found to be not so very far from the fact. Mr. Van Wagner's "sulphur blower," exhibited to our Association, and which has received its endorsement will be found the best help to prevent the ravages of mildew. We entertain the opinion that mildew can be greatly modified if

not altogether prevented by good, generous cultivation : manure rich in potash, carbon, &c., &c., will go far to remedy the evil. Whenever the food of the vine is stinted its vigour wanes, and consequently opportunities are given for the development of all manner of parasitical and insect pests. The leaf roller is an insect pest which of late years has appeared with us ; its ravages are not very deadly and may be easily prevented with a little care. The thrip, after all, is, at present, our greatest pest. When down on a visit to Ohio and Kentucky, a year ago, I found it a common practice there for grape-growers to destroy this pest by means of torches at night. One carries the torch, another disturbs the vines, and the enemy betakes himself to the flame. Mr. Saunders, of London, two years ago, discovered a pest in the pip of the Clinton grape, but our experience fortunately has not made us further acquainted with its ravages. Grapes can be kept for a lengthened period by having them carefully strung and kept in a dry airy room. W. H. Boulton, Esq., the Grange, Toronto, keeps them for months in this manner. For the encouragement of grape-growers to prosecute this branch of horticulture, I refer them to the statistics of grape-growing on the last pages of "Husmann, on Grapes and Wine." Again renewing my grateful sense of your courtesy, gentlemen, and expressing my continued interest in fruit growing and its development throughout the Province. I wish you in the heartiest and sincerest manner every success in your laudable and patriotic efforts for the advancement of horticulture.

ROBERT BURNET,
President.

FRUIT GROWERS' ASSOCIATION.

WINTER MEETING.

The regular winter meeting of the Fruit Growers' Association was held on Tuesday, Feb., 7th, 1871, in the City of Hamilton. There was a good attendance, members being present from London, Goderich, Brantford, Toronto, Cayuga, Clifton, Niagara, St. Catharines, Winona, Milton, Oakville, Wellington Square, Thamesford, and other places.

The minutes of the last meeting were read and approved.

The following papers were then read, viz :—

By the President, on Thinning Fruit.

By A. B. Bennett, Esq., The Garden and Farm.

By G. Leslie, jr., Esq., Tree Planting for Shelter.

By W. H. Mills, Esq., Vegetable Tissues and Fire Blight.

By Rev. George Bell, Experiments in the Culture of Small Fruits.

Moved by Mr. Morse, seconded by Mr. Saunders, that the gentlemen who have read papers be requested to hand their papers over to the custody of the Directors for disposal as they think fit. Carried.

Moved by Mr. Holton, seconded by Mr. Martin, that a cordial vote of thanks be tendered the gentlemen who have so kindly furnished the papers we have just heard read. Carried.

Resolved,—That the seedling and other apples be handed over to the Fruit Committee to examine and report.

Mr. Arnold brought a russet apple before the meeting, for the purpose of eliciting an opinion as to whether anyone had seen anything like it before. After various opinions had been given, he stated that it was a Spitzenburg, a remarkable variation from the normal form.

Mr. Arnold also read an interesting letter from Mr. Thomas Meehan, of Philadelphia, in relation to a singular combination of the apple with the pear, which had been sent by Mr. Arnold to Mr. Meehan. It was a fruit shaped like an ordinary apple, and having the external appearance of an apple, but found growing on a pear tree. Mr. Meehan stated in his letters that he had carefully examined the fruit sent him, that he had found the pulp to be apple, and the stem, core and seeds to be pear, and was of the opinion that it was produced by the blossom of the pear tree having been fertilized by the pollen of an apple.

Here is a new field for investigation. Can the pear be fertilized by the apple, or the apple by the pear? If so, what new combinations are yet to be brought out by the crossing of these fruits, and what a field of experiment is open for the fruit raiser! It is to be hoped that Mr. Arnold, who is skilled in cross-fertilization, will make such numerous and careful

experiments next spring as will settle the question of cross-fertilization between the apple and the pear.

Moved by Mr. Martin, seconded by Mr. Morse, that any member sending to the Secretary the names of five new members, with their subscriptions, shall be entitled to a double supply of fruit trees at the next distribution. Carried.

The discussion of the appointed subjects was now taken up.

BEST TIME FOR TRANSPLANTING TREES.

Mr. Freed approves of digging the trees early in the spring, as early as possible; trim the roots and heel them in until ready to plant.

Mr. Watson, Summerville, has light land, and has found fall planting most successful with him. Does not prune, in case of fall planting, at the time they are planted, but in the spring following.

Mr. Grey, of Toronto—It depends on the soil; fall planting is to be recommended on light soil, spring planting when the soil is heavier. If planted in the fall, the trees should be banked up with earth, or mulched, to protect the roots.

Mr. Holton, of Hamilton, thinks, as a rule, spring planting is most successful; but when a fall planted tree survives the winter uninjured, the growth during the following year is much better. Fall planting does as well, perhaps better; cover the roots well with earth, taking care to select a dry place for them.

Mr. Bell, of Clifton, has had excellent success with spring planting.

Mr. Arnold, of Paris, thinks there can be no general rule for either spring or fall planting. If the wood is well ripened, and the winters not too severe, thinks fall planting would succeed best, but, taking all things into account, would usually recommend spring planting.

Mr. Caldwell, of Galt, advocates spring planting, but would recommend the taking of trees up, and root pruning and heeling in in the fall, because the cut roots become calloused during the winter, and more readily send out their rootlets when planted out.

Mr. W. Brooking, of Dundas, believes in spring planting; if trees are properly mulched, thinks there is little danger of losing them from the heat.

Mr. Hopkins, of Stoney Creek, has found spring planting do well. Out of 400 trees planted in the spring has only lost 4. Believes that want of success in planting is often due to the length of time the trees have been out of the ground. Advocates purchasing trees as near home as possible, so as to lessen the risk in this way.

Mr. Graham, of Fort Erie, believes that there is more in the way in which the trees are planted than in the time of planting; advocates spring planting, mulching, and staking.

Mr. Bell, of Clifton—Parties planting should see that the land is well drained before planting; if this be done, thinks there is little danger, providing the planting is done well, whether it is done in spring or fall.

Mr. Mills, of Hamilton, advocates fall planting, because the roots heal over during the winter.

Mr. D. W. Beadle, of St. Catharines, thinks the healing process in the root will not take place unless the tree be deeply covered when heeled in, sufficiently to exclude the frost. Fall planting is theoretically the time for planting, and believes fall planted trees, if the work be well done, will succeed best. If heeled in it is all important that the trench be deep and the earth well banked up, so that the roots be out of the reach of the frost.

President Burnett has found fall planting most successful, and thinks he gains time by so doing. No fear of the want of success if the planting is carefully carried out, and the small rootlets properly spread and covered. Believes the fall planted trees keep their foliage better, make a more vigorous growth, and stand the dry weather of summer better.

Mr. Holton finds that there is a great deal of bad planting among those who plant trees. Has known them sometimes to be planted too shallow, with roots scarcely covered; sometimes in a cramped hole seven-by-nine inches, at others planted in a narrow post-hole arrangement eighteen inches deep, into which the tree is thrust half way up the stem. Advises planters to try to strike the happy medium in reference to depth of planting, and loosen the soil well all around the spot when the tree is set.

MANURES.

Mr. Lee, of Hamilton, has found the clipping from hides buried under the surface about vines, with bones broken small, to give a great impetus to the growth of grape vines.

Mr. Grey considers rotted turf the best manure; has found it much better than highly stimulating manures.

Mr. Arnold thinks that barnyard manure answers much the best for general purposes. Does not believe that animal manure buried around the roots of trees or vines is ever good for them, unless the material is well rotted. Believes in bone dust as a manure for vines; would prefer applying manure early in the fall. Thinks there are more trees and vines killed by over-feeding than by lack of manure.

One of the members having referred to the ravages of field-mice among his trees, a discussion took place on the subject.

Mr. W. Saunders advocated the use of stove-pipe iron; cut one sheet into three pieces, and bring each piece into circular form with a roller; enclose each tree in one of these and tie it with string. The cost of this on a large scale will be $3\frac{1}{2}$ cents per tree.

Mr. D. W. Beadle recommended that the trees be painted with a mixture of lime, cow-dung, and soot, after a receipt given by Charles Downing, and published in the *Canada Farmer*.

Mr. Grey agreed with Mr. Beadle.

Mr. Brooking had found stove-pipe iron very useful as a protection, and very cheap.

Mr. Mills advocated the use of 4 inch tile, split up the middle, the two halves placed together and tied with a string.

The discussion of manures was resumed.

Mr. Caldwell thinks all manure should be composted. The fall would be the best time, and the application should be made on the surface in light soil; if the soil be heavy then it should be slightly covered.

Judge Logie uses ashes, and, for vines, broken bones mixed with manure from barn-yards. Fall manuring on the surface is preferable.

Mr. Barnes, of Hamilton, uses all he can get; puts in salt, a pailful to a load of barn-yard manure, uses plaster also; for grape, does not like high manuring.

Mr. Lewis, of Clifton, uses common stable manure on the surface for grapes. If you wish a crop manure moderately; thinks high manuring produces much wood and but little grapes.

Mr. Graham, of Fort Erie, said: All kinds of manure are good; put on all you can get well prepared, and for grapes cut back well. Prepare thoroughly for new orchards before you plant; for old orchards put on strawy manure from cow yards. Sprinkling with plaster is also very beneficial; bone dust may be applied anywhere. I think salt not good. For new orchards I used well rotted manure and worked it in; for peaches I find ashes the life of the tree, and also keep the grass away. Ashes are good for any kind of tree. I seed my old orchard in pasture.

Mr. Bell: To determine the exact manure would require an analysis of the soil. Manure should be composted and applied near the surface. Bone dust and ashes are always good. Fresh manure, if applied to the surface in the fall, will not harm; if in the spring it should be well composted. Ashes are particularly good for grapes.

Mr. Bennett: At first I trenched and manured largely, now I manure lightly and have less wood, but more fruit. I manure with plaster, ashes, &c., in the fall. Salt is not good for all trees. The plum, being a marine tree, is greatly benefitted by the use of salt in moderate quantity. A friend used the flesh of some cattle for manure; it caused fungus on his vines, which destroyed them.

Mr. Ross, of Goderich—For grapes I use a compost of muck and manure. My soil is gravelly. I apply to the surface in the fall.

There was a fine display of choice apples and a few pears placed upon the table.

The fruit committee presented their report, which is given below.

It was resolved that the summer meeting be held in Hamilton, and the autumn meeting in Goderich. The time for holding each meeting to be fixed by the directors.

REPORT OF FRUIT COMMITTEE.

An apple, said to be a seedling, exhibited by Mr. Demick, of West Flamboro', through Mr.

Brooking, of good size, fair appearance, smooth skin, yellow splashed with red; form, flattish oblong; quality at present second-rate, but evidently past its prime. The apple somewhat resembles the Colvert, but no improvement thereon. We would recommend the exhibitor to send specimens next year, when the apple is at its best, for the opinion of the fruit committee, to the President of this Society.

SUMMER MEETING.

The regular summer meeting was convened at Hamilton, on Tuesday, July 4th. There was only a moderate attendance at the morning session, in consequence of the rain, but fresh accessions were made to the number during the day, so that there was on the whole a very creditable attendance and a fine display of fruit.

It is very much to be regretted that there is not to be found in the City of Hamilton a suitable and convenient room for the holding of such a meeting. This is now the third time that the meeting of the Association has been disturbed by the necessity of adjourning from the room in which it was convened to some other place. These things are not only disagreeable, but they are a serious interruption and a waste of much valuable time. In truth, there should be two rooms at the disposal of the society for the day, one in which the meeting for discussion is held, and the other in which the fruit is placed. By this arrangement the committees appointed to examine and report upon the fruits, can make their examinations without disturbing the deliberations of the meeting.

The meeting was called to order by the Vice-President, J. C. Rykert, Esq., M.P.P., and, after the transaction of some routine business, the discussion of the subjects for the day was commenced.

STRAWBERRIES.

The best six varieties of strawberries for the table was first considered. Mr. Rykert could not find six varieties that he would care to cultivate, after having tried several scores of sorts, but would name in the order in which they stood in his estimation: Triomphe de Gand, Charles Downing, Russell, and Early Scarlet. He had found the Charles Downing to withstand the drought remarkably well, and the Russell to be of large size and very productive. The Agriculturist had proved with him to be a shy bearer, and not highly flavoured. He had tried the President Wilder, but it had wholly failed in productiveness, and he had been compelled to cast it out as quite unsuitable to his grounds. He had also tried the Marguerite, which was shown at the meeting in Galt, and astonished every one by its enormous size; but he had been wholly unable to raise anything more than berries of medium size. Mr. Rykert's soil is a porous gravelly loam, and he cultivates all his strawberries in hills, keeping the runners pulled off. He thinks this the best and most convenient system of cultivation, yielding the largest returns, and obviating the necessity of planting new beds every two or three years.

Rev. Mr. Bell had succeeded only with the Wilson, which was hardy and very productive.

Mr. A. B. Bennett placed Lennig's White at the head of the list, as being the finest in flavour of them all, and with him it had been quite productive. After this he would name Cushing, Wilson, Green Prolific, Monroe Scarlett and Fillmore. Mr. Bennett's soil was wholly a made soil; it had originally been low and wet, but had been filled up, and was very deep and rich. Dr. L. Cross named the Triomphe de Gand, Trollope's Victoria, Early Scarlet, Hooker, Hovey, and Jucunda. His soil is a clayey loam. He cultivates the Triomphe and Jucunda in hills. The Wilson yields by far the largest crop. After taking two crops, he renews by planting new beds and destroying the old ones.

Mr. W. H. Mills could name only the Triomphe de Gand and Wilson.

Mr. Saunders named only three: Jucunda, Green Prolific and Downing.

Mr. Laing, of St. Thomas, named the Wilson and the Hooker. Had given Bishop's Canada a careful trial, but it was not productive, and he had dropped the cultivation of that sort altogether.

Mr. Linus Woolverton cultivated the Jucunda for the table, which he esteemed as the best.

Mr. Arnold thought that this question should be considered as one of quality, that the six varieties having the finest flavour and most desirable to be placed on a gentleman's table should be named, irrespective of the cost of production. Taking this view, he would name the

Bishop's Canada as the most delicious strawberry he had ever grown, and place it first on the list of the six best table sorts. It was, indeed, a very unproductive variety, but when they could be had they were of the very highest quality. Next to this he would place the Hooker, as a very highly flavoured berry, then the (American) President Wilder, Charles Downing, Jucunda, and Trollope's Victoria.

Mr. Holton could not view the subject quite in the same light as Mr. Arnold. He thought cost of production should enter into the estimate of the qualities of a variety even for amateur culture. He named Early Scarlet, Wilson, Triomphe de Gand, Macavoy's Superior, Jucunda, and Hovey.

Mr. Lewis named only the Wilson.

President Burnet was not able to give the names of six varieties that he would advise amateurs to plant for the table, for with him, and he thought with most planters, the productiveness of a variety had much to do with its desirableness. When he had a good berry he liked to have plenty of it; and as many amateurs, probably the most, had only small gardens, it was an object with them to get as much as possible from a small piece of ground. He therefore named the following as in his view the best: Wilson (the most productive of all), Triomphe de Gand, Jucunda, and Nicanor. The last named sort had endured the drought remarkably well.

The question of the six varieties of strawberries best suited for market purposes was then discussed.

Mr. Rykert named only one variety that he considered at all profitable as a market variety. This was the Wilson. He practised and strongly recommended the cultivation of the strawberry in hills and keeping the runners cut off, and believed it to be the most profitable method. His soil is a light, dry, gravelly loam.

Rev. Mr. Bell knew of no variety so suitable as the Wilson.

Mr. Bennett spoke of carrot tops as a most excellent winter covering for the strawberry plants, and which, being suffered to decay on the ground, enriched the soil and brought no seeds of grain or weeds. He could name no variety at all comparable to the Wilson for market.

Dr. Cross was fully of the opinion that in the present state of our markets, when berries sold at a rate not averaging higher than ten cents per quart, there was no profit in growing any other variety than the Wilson.

Mr. L. Woolverton has tried many kinds, but none of them can equal the Wilson.

Mr. Arnold thought it was desirable to take as much advantage as possible of the higher prices which ruled in the opening of the strawberry season, and therefore would plant a few of Metcalf's Early and a few of Nicanor, because these are earlier than the Wilson. Also the Nicanor stands dry weather very well, and in such seasons has on this account some advantages; but for the bulk of his crop he should rely on the Wilson. He plants in rows four feet apart, and the plants one foot apart in the row; keeps clean with cultivator and hoe, and after taking two crops turns under with the plough.

The President has found a liberal dressing of leached ashes to be a very beneficial application.

At the opening of the afternoon session the President read a very interesting paper, which had been sent in by Mr. James Dougall, of Windsor, on the subject of cheap glass structures for growing Exotic grapes, and their management. The paper was received with thanks, and referred to the Printing Committee.

RASPBERRIES.

Which are the best six varieties of raspberries for the table? was then announced as the subject for discussion.

Mr. Morse had tried the Red Antwerp and Franconia with but poor success, and much preferred some of the Black-caps.

Dr. Cross estimated Brinkle's Orange very highly, and gave that the preference. He also thought favourably of the Philadelphia.

Mr. Woolverton named in connection with Brinkle's Orange the Red Antwerp.

Mr. Rykert could not recommend six sorts, but would plant in addition to Brinkle's Orange, Lum's Ever-bearing, which is an autumn bearing variety of the black-cap, and exceedingly productive; Golden Thornless, which is a handsome yellow fruit, the cane without

spines, and exceedingly productive, though the flavour was not high; and the Belle de Fontenay. Perhaps, to make out the six, some would add the Franconia and Davison's Thornless.

Mr. Bell was much pleased with the Red Antwerp as a fruit, but the canes were very liable to be injured by the winter.

In discussing the subject of the best six varieties for market,

Mr. Woolverton named the Mammoth Cluster and Doolittle, both of them black-caps and both hardy and productive.

Mr. Rykert thought that the black-caps would bear transportation so much better than the other sorts, that they would be found on that account the most valuable for market. He cultivates his raspberry plants in single stools, six feet apart each way.

Mr. Lister had recently planted Brinkle's Orange, Franconia, Philadelphia, Davison's Thornless, Doolittle, Mammoth Cluster and Golden Thornless, but could not yet speak of their respective merits.

Rev. Mr. Bell admired the black-cap varieties.

CURRENTS.

Which are the best six varieties of currants?

Mr. Hyslop had cultivated with success the Red and White Dutch and White Grape. They were prolific, and he had been able to keep down the worms by the use of hellebore.

Mr. Brooking preferred the old Red and White Dutch, especially for market. He had also grown the White Grape and the Cherry, and Black Naples. He had found the use of white hellebore of great benefit, and had succeeded in completely routing the currant worms.

Mr. Morse grew the Red and White Dutch, the Cherry Currant, and the Black Naples. He thought the Red and White Dutch the best for market, being hardy, productive, and meeting with a ready sale. For flavour he prefers the White Grape. The insect enemies he is able to keep in entire subjection by the use of white hellebore.

Mr. Bell prefers the White Grape for flavour, but for culinary purposes finds the Red Dutch to be the best. Had found the Black Naples prolific and good.

Mr. Saunders is much pleased with the Cherry and White Grape sorts, to which he would add the Prince Albert, on account of its ripening later, and so prolonging the currant season.

Mr. Woolverton named the Cherry, White Grape and White Dutch.

Mr. Laing prefers the old Red and White Dutch; the Cherry variety, though larger, was not as good.

Mr. Rykert preferred the White Grape and the Cherry, though he did not esteem the fruit as one of any great value. He doubted whether the cultivation of this fruit for market would ever be profitable.

Mr. W. H. Mills thought very highly of the currant; grew the White Grape, the Cherry, Red and White Dutch. He could not get too much of this fruit for market. The Cherry currants brought 20 cents a quart, the Red Dutch only 10 cents; and he therefore thought that the Cherry currant was the best sort to grow for market, and that it was also profitable. He thought the fruit was conducive to health. In point of flavour he gave the preference to the White Grape.

Mr. Laing said that currant jellies were largely imported from Scotland, and that we might just as well supply this demand with a home product, if the proper attention were given to the matter.

The President spoke very approvingly of fresh currants on the tea-table, with sugar and cream, as being both delicious and wholesome.

Mr. Bennett would as soon do without his strawberries, and had observed that buyers from Buffalo came to Brantford, and paid good prices for them. In some places, according to President Wilder, as much as thirteen hundred dollars had been taken from an acre of currants.

Mr. Morse had people come to his place for them, and give good prices. Mr. Brooking had not been able to supply the demand for them at Dundas, and Mr. Saunders remarked that at London they have always a ready sale; and Mr. Rowe, of Paris, had sold his crop

while they were in blossom. He had found the Cherry variety to be very prolific. White hellebore was a perfect cure for the saw-fly or currant worm.

Rev. Geo. Bell had not found the Cherry as prolific as the Red Dutch; were it only as good a bearer, he would prefer the Cherry. He regarded the Black Naples as a very valuable sort, although very little was said about it. It made a most excellent jam, which was useful in many ways, and made very wholesome and refreshing drinks.

Mr. Arnold had grown a number of so-called varieties of Black Currants, such as the Black English, Black Grape, Black Bang-up, but could not see enough of difference to make a distinction. The Red Dutch had been badly injured by the currant-borer of late, and was inferior when compared with others. The Cherry was tart, but the White Grape was of fine flavour, first-class.

Mr. Freed remarked that the Black English and Black Naples differed in time of ripening. The Black Missouri is a very poor affair. The White Grape is the finest flavoured, but the Red Cherry is the best for jelly. The Champagne made a very handsome jelly.

The President exhibited some samples of the Champagne variety, which were of a beautiful bright pink colour, and intimated that any member of the Association could have cuttings from his plants, as he had several of them.

Mr. Holton considered the Cherry as the best for market, and for jellies the Red Dutch, when well grown. Cultivation makes a great difference in both flavour and size of the Red Dutch, being very much improved in both by liberal supplies of manure, clean cultivation, and judicious pruning. The currant worm is easily destroyed by timely and persistent use of hellebore, in the proportion of one ounce to a pail of water. The moths of the currant (stem) borer can be destroyed by the use of dishes of sweetened water or poisoned cloths. The enemies of the black currants are not so numerous or so serious as those of the other sorts.

Mr. MacCallum had found the several sorts of currants to be quite prolific. He grew the Champagne, Cherry, and Red and White Dutch.

The President called the attention of Mr. Saunders, who is the Entomologist of the Association, to the existence of a small insect found feeding on the black aphid, and in this way rendering a valuable service. He thought it might be the same as the insect known in Scotland as the "Grave-Digger."

Mr. Saunders stated that it was not the "Grave-Digger," but was the larva of one of the Lady-birds, and very much resembled the "Grave-Digger." He exhibited several of them, which he had with him in a small box. They were about three-sixteenths of an inch in length, dark purplish colour, with yellow dots. He also stated that there was a gauze-winged fly, which was doing its share in the destruction of these aphids, with which it was desirable all fruit-growers should be familiar, and recognize it as a friend. Its expanded wings measured about three-quarters of an inch; it had bright fiery eyes, and, when handled, emitted a disagreeable smell.

GOOSEBERRIES.

The next question discussed related to gooseberries—which are the best six varieties?

Mr. Hyslop had been successful in growing the gooseberry. The Houghton succeeded the best; but he had also raised fine fruit of the Whitesmith, Ironmonger, &c. He had succeeded in preventing the mildew by mulching.

Mr. Brooking had been troubled some with the mildew on a clay loam soil. The Whitesmith always mildewed, and so did the Warrington. He had raised a couple of seedlings, the one dark green, the other a dark variety. The caterpillar did not feed on the foliage of the dark green one. Had found the Houghton's Seedling to be one of the best for market.

Mr. John Freed remarked that the Whitesmith does not mildew on the Hamilton clay. Has planted Downing's Seedling, a good light green variety.

Mr. Morse grows for his own use the Houghton's Seedling. This is free from mildew, but Downing's Seedling mildews.

Mr. Osborne had been much pleased with Warrington, Jolly Angler, and Hardy's Red. He trims close, plants six feet apart, on a light gravel soil. There is a berry in Mr. Kerr's garden at Beamsville, which never mildews; it has a tuft upon it.

Mr. Saunders said that all the foreign sorts mildewed badly about London. The Downing mildews and bears poorly when the plants become old. Houghton does not mildew.

Mr. Woolverton named only the Houghton.

Mr. W. H. Mills is of opinion that by growing the gooseberry well up from the ground, and by mulching with cut grass, and giving the mulch an occasional sprinkling with water in which a little salt has been dissolved, the mildew may be prevented. The Houghton is a good variety, being much inclined to over-bear.

Mr. Arnold remarked that if confined to one variety, he should choose the Downing's Seedling. Mr. Downing raised two seedlings; only one of these has he thought worthy of a place in his great work on the Fruits and Fruit Trees of America. This is the one there described under the name of Downing, and is a light green fruit. The other, known as his number two, is a red one, and that one he (Mr. Arnold) would choose as the second. Mr. Hart, of Paris, has some promising seedlings.

Mr. Cranfield raises gooseberries; his do not mildew.

Mr. Rowe, of Paris, said he came to the meeting on purpose to speak a friendly word for gooseberries. He has cultivated them very successfully for seven or eight years. Has grown Ploughboy, Roaring Lion, and Conquering Hero, and kept them from the mildew. He applied water, salt, and ashes, and this preserved them from the mildew. He uses unleached ashes, sprinkling them on the bushes. His soil is kept in a high state of cultivation.

Mr. Rykert had been informed that abundant mulching with grass would prevent the mildew. He had tried several of the English varieties, but was obliged to fall back on Houghton.

Mr. Barnes had tried the plan of letting the plants take care of themselves, and they always mildewed.

Mr. Lister has failed with the best gooseberries.

Rev. Mr. Bell thinks something besides mulching is needed, and that is a more uniform temperature. Has found good gooseberries at Guelph, on the Speed, raised but little above its level.

Mr. Lowry inquired what was the cause of mildew.

Mr. Mills said he thought it was a parasitic plant, which grew upon weak or sickly gooseberry trees, but could not thrive upon those that are in perfect health.

Mr. Arnold thought that mildew was a parasitic plant.

The President thought we were trying to grow the gooseberry in an unfavourable climate, and hence our great want of success.

Mr. Saunders stated that sulphur is a remedy for the mildew.

Mr. McCallum thought that our sudden and extreme changes of temperature brought about those conditions which were favourable to the growth of these parasitic fungi.

Professor Buckland thought that the climatic conditions of the west and north of England, Cheshire and Lancashire, and parts of Scotland, and most of Ireland, were favourable to the growth of the gooseberry. Wherever the vine flourished the gooseberry failed. He spoke of the recent examinations into the subject of mildew by the Rev. Mr. Buckley, of England, who ascertained that the spores of these fungi exist in the atmosphere, and when they found a suitable place for development with favouring conditions, there they grew, and produced the appearances we term mildew. Our climate does not favour the growth of the gooseberry, and Canadian cultivators of this fruit will always find themselves beset with difficulties arising from the varying conditions of the atmosphere, and especially its very variable and extreme hygrometric conditions.

CHERRIES.

The best ten varieties of cherries to give a succession.

Mr. Freed said that the earliest useful cherry was the Mayduke, then came the Governor Wood, Belle d'Orleans, Knight's Early Black, Black Tartarian, American Heart, Bigarreau or Yellow Spanish, Napoleon Bigarreau, Tradesant's Black Heart or Elkhorn, Monstreuse de Mezel, Reine Hortense, and Late Duke. These were all good sorts, and would keep up a good succession. He had noticed that the Governor Wood Cherry, when grown on the Canada Wild Plum as a stock, ripened its fruit five or six days earlier than when grown on the Common Mazzard Cherry stock.

Mr. Lowry remarked that he had been in the habit of working the finer varieties of cherry on the common Kentish cherry.

Mr. Morse had never tried the Reine Hortense, and would therefore substitute for that variety in Mr. Freed's list the Coe's Transparent. It is a fine cherry, better flavoured on high lands, and ripens earlier than when grown on low lands.

Mr. L. Woolverton named the following as keeping up a good succession, viz—Governor Wood, Rockport Bigarreau, Knight's Early Black, Elton, Black Tartarian, Belle de Choisy, Napoleon Bigarreau, Black Eagle, and Elkhorn.

Mr. Barnes stated that he had a variety which ripens three weeks after any other cherry; is tart, and excellent for canning.

Mr. Saunders and Mr. Mills thought that the lists proposed were excellent, and made no suggestions.

Mr. Rykert thought the following four old varieties were the best, namely, American Heart, Elkhorn, Mayduke, and Black Tartarian.

Mr. Lowry thought there were not enough acid cherries mentioned in the lists given. He esteemed the Mayduke among the first of cherries, and thought the Kentish for canning and all cooking purposes was one of the best that is grown.

The discussion having terminated, the Report of the Committee on Seedling Fruits was read and accepted. It is as follows:—

Cherries—No. 1, a seedling from Mr. Jas. Dougall, Windsor, medium size, jet black, flesh tender, luscious, very good.

Seedling No. 2, from Mr. James Dougall, large, dark, clouded red, firm flesh, not high flavoured.

A seedling cherry from Mr. Hatt, large, lively red, fine flavour, closely resembles the Mayduke in its best state.

Seedling cherry, from Mr. Freed, glossy black, large, juicy, good flavour, promising sort, called "Steven's Black Heart."

Seedling cherry from Mr. Freed, medium or less, pale red, semi-transparent, slightly bitter, pleasant flavour.

Seedling gooseberry from Mr. Hart, Paris, large, oblong, smooth, yellow, said to be free from mildew, promising sort.

The Association adjourned, to meet again at Goderich at the call of the President.

AUTUMN MEETING—DISPLAY OF FRUIT.

The Fruit Growers' Association of Ontario, held their autumn meeting at Goderich, on Friday, the 15th September. There was an extensive display of fruit, which was exhibited in the Drill Shed, where the Goderich Horticultural Society were holding their Fall Show. The combined collections of fruit were very fine. Most of the day was taken up in the examination of the fruit on exhibition, and it was not until four o'clock in the afternoon that the Association met in the Court House for the discussion of matters of interest to themselves.

The prizes offered by the Association were keenly contested. In the twenty varieties of apples, the prize was taken by Mr. John Freed, of Hamilton, who also carried off the premier prize for the best twenty varieties of pears, and for the best dozen quinces. In apples, Mr. J. Stewart, of Goderich, was second, and Mr. James Torrance, of Porter Hill, was third. These were all very fine samples of fruit. In the twenty varieties of pears, Mr. Geo. Leslie, Jr., of Toronto, was second, and Mr. M. D. Baldwin, of Brantford, was third. The collection of pears to which the premier prize was given, was one of the finest samples ever exhibited in this Province.

The collections of grapes were exceedingly fine, and some of the samples laid upon the table for exhibition merely, were such as to call forth expressions of astonishment from every one. Three bunches of the Wilder grape (Rogers' No. 4), were of surpassing size and beauty. They weighed respectively sixteen, eighteen, and twenty ounces, and were the growth of Mr. Matthew Bell, of Hamilton. It was stated by gentlemen at the meeting, who had seen the grapes growing on the vines, that no ringing of the vines had been practiced. The highest prize for the best collection of ten varieties of grapes, was given to Mr. W. Has-

kins, of Hamilton ; the second to Mr. John Freed, of the same place; and the third to Mr. A. M. Ross, of Goderich.

The display of plums was very fine, though the greater number of fine varieties had been ripe for some time, and were mostly gone. Goderich and vicinity has been famed for fine crops of plums of the highest quality, and it was to be expected that the prizes in this fruit, would be carried off by gentlemen resident there. The highest prize was won by Mr. A. Watson, of Goderich, and the second by Mr. J. Stewart, of the same place. We did not learn who gained the third.

There were but two collections of crab apples, of fine varieties, and these were both from Hamilton. They were very beautiful specimens of this very pretty fruit. Mr. W. Holton received the first, and Mr. W. H. Mills, the second prize.

The prize for the best Canadian seedling apple, was given to Mr. George Smith, of Brantford. The apple to which this prize was awarded, was of very fine texture and pleasant flavour, though, not being in season, it is quite impossible to tell of how fine a quality it would have been when perfectly ripe. It was of a dark red colour, smooth and free from blemishes.

There were no seedling pears exhibited that were thought by the judges to be worthy of a prize. The only samples we saw were inferior both in size and quality.

There were some very fine seedling peaches exhibited, especially prominent was a considerable collection from Mr. Cowherd, of Newport, near Brantford. Several of these were cling-stones, and though of good flavour in that class, the fact that they were cling-stones rendered them less desirable. But the variety to which the judges awarded the prize was certainly a very fine peach, of good size, handsome appearance, and excellent flavour. It was a yellow-fleshed fruit, with dark crimson cheek, and was marked No. 1. It is a very highly commendable feature in the action of the Directors of this Society, that so much effort is made by them to induce amateurs to undertake the production of new varieties of these and other fruits, and we confidently expect that we shall yet have produced among us a class of peaches, &c., of excellent quality, and better adapted to our climate than many of the sorts now in general cultivation.

In seedling plums, we noticed only one plate, which was placed on the table by W. H. Mills, Esq., of Hamilton. It was of medium size, ripening rather late, we fear, for general usefulness in this climate, and hardly of sufficient excellence of flavour to rank higher than a cooking plum.

There were several varieties of Canadian seedling grapes exhibited. One was shown by Mr. J. Dougall, of Windsor, grown from seed of the Clinton, sweeter than that variety as grown in this climate, and evidently ripening earlier, though in size of berry and form of bunch much resembling the Clinton. Mr. Arnold's seedling varieties were also on the tables, and though the berries are not large, yet the character of the pulp is a great advance on such grapes as the Concord and Isabella. From what we saw of these grapes at this time, and from tasting them on our own grounds and elsewhere, we are disposed, on the whole, to give the preference to the variety which Mr. Arnold calls "Canada." It is fully ripe now, September 18th, sweet, fine flavoured, free from pulp, and only lacks size to make it a very popular grape. Another seedling grape was shown by the Rev. Mr. MacLeod, of Chippewa. It was a chance seedling, raised by the late Albert Oxley, of Font Hill, but fruited by Mr. MacLeod. It was a white grape of very fine appearance, of good size, both in berry and bunch, and of good flavour and free from pulpiness, though hardly quite ripe. Judging from the appearance of the fruit, it belongs to the Chasselas grapes, and is probably a seedling of one of them. Some experiments in the raising of seedling grapes from European varieties, which have been made in the State of New York, lead to the hope that varieties have even now been obtained which endure our climate well, do not suffer from mildew, and yet retain the excellent qualities of this class of grapes.

There was but one plate of Canadian hybrid grapes not before exhibited, and this was shown by Mr. W. H. Mills, of Hamilton. We fear it ripens too late to be of general usefulness, though it is too soon to be positive on any point concerning it.

There were also a number of seedling crab apples shown by Mr. George Smith, of Brantford, some of them very handsome, which received the commendation of the judges.

MEETING.

The meeting of the Association was called to order by the Rev. R. Burnet, President ; and after the reading of the minutes of last meeting, some discussion was had concerning the printing of the Essays which are read from time to time before the Association. On motion of Mr. A. M. Ross seconded by Mr. Mills, it was resolved that the Directors be requested to cause such of the Essays that are presented to this Association, as they may deem best, to be published from time to time in the *Canada Farmer*.

The President introduced to the meeting Mr. Van Wagener, the inventor of an instrument for dusting vines and plants with sulphur or hellebore, or other powder, and requested him to exhibit his instrument and explain its construction and use.

Mr. Van Wagener came forward, and exhibited to the meeting a very neat, convenient, and efficient instrument for dusting plants with any powdered substance. It is more convenient than the well-known De La Vergue Bellows, distributing the powder much more perfectly and rapidly. The wind which effects this is created, not by the action of a bellows, but of a rotary fan, which keeps up a constant current of air, throwing the sulphur or other powder in a continuous stream, and not in interrupted jets. A committee was appointed to draw up a report expressing the views of the meeting with regard to this most useful instrument.

ESSAYS AND PRIZE.

The Secretary presented an Essay on Fruits and Fruit Culture, by Mr. W. Saunders, of London. It being lengthy, and the time of the meeting already largely taken up, it was ordered to be received with thanks to the writer, and referred to the committee on publication.

The Secretary further reported that the committee appointed to read the essays received in competition for prizes, had awarded the second prize to the one bearing the motto "I moisten the roots of all that grow," and that, on opening the envelope bearing this motto, he found the name of P. E. Bucke, Esq., of Ottawa.

Some discussion was had upon the subject of offering prizes by the Association for fruits already in general cultivation ; and after eliciting the opinions of the members present, it was, on motion of Mr. Arnold, seconded by Mr. Holton, unanimously resolved that in future this Association shall restrict their Fruit Prize List to new and seedling fruits.

DISCUSSION.

The management of vineyards was proposed as a topic for discussion, and Mr. Farrell, of Cayuga, inquired whether any person could give any information of the effect it would have upon an established vineyard if it were laid down in grass.

Mr. Laing, of St. Thomas, replied that he had recently been in Cleveland, Ohio, and had there seen a vineyard that was a complete lawn, with the exception of a narrow strip about one foot in width on each side of the row of vines, and that it seemed to be in a very flourishing condition.

Mr. Shoff, of McGillivray, said he had seen a small vineyard in South Huron which was growing in sod, and seemed to be doing well.

Mr. Arnold, of Paris, said that his neighbour, Mr. Hamilton, had tried sod, and afterwards removed it. He thought that in a dry season the effect would be very injurious.

Mr. Dougall, of Windsor, thought thorough cultivation would be best. He had seen buckwheat sown among the vines, and both turned out bad.

Dr. Cross, of St. Catharines, described the vineyards of Cooksville, where alternate spaces between the rows of vines are laid down to grass.

THE EFFECT OF ASHES UPON BARN-YARD MANURE.

Dr. Cross stated that the chemist knew that alkalies would not combine with each other ; that the ammonia in manure, and potash in ashes, were both alkalies, and that when the potash came in contact with the manure the ammonia was set free, and went off into the atmosphere.

Mr. Shoff had used leached ashes, 160 to 200 bushels to the acre, with very beneficial results.

Mr. Arnold had thrown it broadcast upon grain, but without any perceptible benefit.

Mr. Holton had composted manure and leached ashes, in alternate layers, for a month, and then applied it to young trees, ploughing it into the soil, with very beneficial results.

Mr. Bennett, of Brantford, had found an abundant supply to have a marked beneficial effect for several years.

Mr. Dougall had experimented with ashes, lime and plaster, upon corn, applying these to ten rows of corn, and leaving ten rows without any, but saw no benefit whatever from their use.

Dr. McDougall, of Goderich, stated to the meeting that he burned some sulphur in his vinery for the purpose of checking the mildew, and that it caused the leaves to fall off from all those vines which were planted in a border, while those vines which were growing in pots, though trained to the rafters of the same vinery, retained their foliage perfectly, and did not show any sign of having suffered from the burning sulphur. He asked for an explanation of this singular phenomenon, but no one ventured to give any.

THE BEST VARIETY OF PEARS TO BE GROWN FOR PROFIT.

Mr. Shoff recommended the White Doyenne, Flemish Beauty, Louise Bonne de Jersey, Duchess d'Angouleme, and the Urbaniste. He said the Bartlett was tender with him, and a tender grower.

Dr. Cross states that he gets more profit from the Bartlett than from any other pear. Next to this he placed the Duchess d'Angouleme, which does not yet seem to be troubled with the blight.

Mr. Dougall had found the Flemish Beauty to spot and crack so badly at Windsor as to be quite worthless. He had noticed that only the very early or the late pears were of any profit; those that ripen when peaches, plums and grapes are most plenty, do not sell for enough to pay for growing them. Of the very early sorts he named Elliot's Early, which he said was a new sort, and that Mr. Roy, at Berlin, had found it to be hardy there. To this variety he would add Beurre Giffard and Supreme de Quimper, both excellent sorts. The Bartlett had been too largely planted to be any longer saleable at remunerative prices. This year it would not bring in their market two dollars per bushel. It is, however, one of the best for canning, and where there are large canning establishments is saleable for this purpose.

Among the late varieties he named as profitable the Duchess d'Angouleme, Beurre Claireau (very productive and very profitable), Onondaga or Swan's Orange, Beurre d'Anjou; for winter, the Lawrence, which is always fair, never spots; Willermoze, best and largest winter pear; Alexander Dumont is very fine; Madame Eliza, one of the best.

Mr. Smith, of Brantford, had found the Bartlett the most profitable. The Flemish Beauty was also an enormous bearer, and also the Louise Bonne de Jersey. Among the later sorts he thought highly of the Beurre Diel, Winter Nelis, and Glout Moreau. His soil was sandy, hardly enough clay to be fit for pears; had suffered very much this year from the fire blight.

Mr. Bennett said the Bartlett had done very well with him. The Flemish Beauty and Louise Bonne de Jersey were also among the best. The Winter Nelis he esteemed the finest pear he raised. The Lawrence, Easter Beurre, and Beurre Diel, are also very fine. Osband's Summer, Dearborn's Seedling, and Bloodgood, are the best early kinds.

Mr. Ross, of Goderich, had found the Bartlett do very well. Onondaga one of the best bearers, fruit fair and fine size, and the tree healthy. The Louise Bonne and Flemish Beauty do admirably.

Mr. Arnold had found the Bartlett the most profitable pear, and the most prolific. In his experience winter pears were very variable in quality, once in a while the flavour was good, but as a rule very unreliable.

Mr. Leslie, of Toronto, stated that the market in Toronto had been glutted with pears. Beurre Giffard brought \$8 per barrel, and Bartlett's nearly the same price, and also the Ananas d'Été. He had found the Flemish Beauty and Louise Bonne de Jersey to be enormous bearers. These, with Vicar of Winkfield and Duchess d'Angouleme, were the most profitable. For winter, he preferred the Josephine de Malines and Winter Nelis. He had found the Sheldon to bear well.

Mr. Parnall, of St. Catharines, stated that dealers complained that the Flemish Beauty did not ship well, that it came out of the barrels badly discoloured. He knew from personal

experience that the fruit blew off badly, and that oftentimes he lost a large part of the crop by their being blown off long before they were fit to gather.

Mr. Shantz, of Waterloo, said the Flemish Beauty bears well, and thrives well in that section. He had kept the Flemish Beauty quite late in the winter by packing the fruit in maple sawdust.

President Burnet desired to call the attention of the members to some varieties of pear not generally known. He had found the Fondante de Malines to be superior to the Belle Lucrative. The Graslin was a variety that does not spot; is large and profitable. Ananas d'Été is hardy, and better than the Bartlett. Duchesse d'Orleans is a very handsome and desirable fruit. Madame Eliza is also very handsome. Willermoze is very hard to ripen well. Viscount de Spaeberg is a very fine winter sort, ripening about Christmas. Of the older varieties, he remarked that the Winter Nelis requires to be well fed, and it is then one of the very best of winter sorts. The Vicar of Winkfield should be placed in barrels in the cellar until the time of ripening, then should be placed in paper bags, and kept in a warm room for about a fortnight, when they will be found to be good. The Lawrence is a very fine pear, always fair. The Sheldon bears great crops about Hamilton, and is much sought for in the market. The Louise Bonne grows well, bears abundantly, and sells well. The Flemish Beauty is one of our most hardy varieties, thriving well even in the vicinity of Ottawa.

Mr. Mills, of Hamilton, keeps the Vicar of Winkfield in the cellar the same as apples, but ripens them by wrapping a few at a time in flannel, and placing them in a drawer in a warm room.

Mr. Leslie keeps only the best specimens of this pear; places them in a warm and dark garret, and they ripen up very fine. The tree is very healthy and hardy.

Mr. Watson, of Goderich, finds the Oswego Beurre, a fine bearer, very hardy and profitable. The Louis Bonne is a good grower, and very productive, especially if supplied with a good dressing of ashes.

Dr. Cross stated that he had lost half of his trees of the Vicar of Winkfield with the pear blight, and thought the variety quite subject to this disease.

Mr. Ross had grown it for eight years, and found it healthy, and Mr. Arnold said he had grown it for twenty years, and the tree is yet healthy.

Mr. Dougall said they were not troubled with the pear blight in the vicinity of Windsor and along the Detroit River. He had found the Howell a tender tree, and the fruit not of first quality.

Mr. Leslie had met with the same experience.

Mr. Ross said the tree grew well about Goderich, and was a great bearer, and the fruit was of fine appearance, but only of second quality. He had found the Beurre d'Amalis to be a great bearer and of good quality.

Mr. Dougall said the Oswego Beurre did not sell well at Windsor.

Mr. Mills had found the Beurre d'Anjou a good market pear; the tree is not a very abundant bearer, never overloads, and hence the pears are always of fine size, and command a high price; from twenty to thirty dollars per barrel in the Boston market.

The President had noticed that the Swan's Orange or Onondaga was too acid to be acceptable to many, and that every five out of six objected to it on account of its acidity.

The discussions having been protracted until a late hour of the evening, and many of the members being obliged to leave on the morning train, the meeting was adjourned to the call of the President.

VAN WAGENER—HELLEBORE AND SULPHUR DUSTER.

We, in pursuance of the resolution appointing us a committee to report on the above instrument or machine for discharging powdered hellebore, sulphur, ashes, snuff, or any other powdered substance, for the destruction of all kinds of insects injurious to fruit growing, and of all kinds of fungus growth, beg to report as follows—namely: The inventor, Mr. Van Wagener, having come in person before us and exhibited the merits of the above machine by using it, we were thus in a position to witness its merits, and we have no hesitation in recommending this machine to the general public, as a most efficient instrument,

which should be in the hands of every gardener and fruit grower—believing it to be the most effectual machine we ever saw for the purposes required of it.

W. H. MILLS,
AGNEW P. FARRELL,
JAMES DOUGALL,
W. HOLTON,
D. SHOFF,
GEO. LESLIE, JR.

Read and received.

THE RED ASTRACAN APPLE.

This apple was first brought to England from Sweden, in 1816, and from thence it has been scattered abroad, in course of time crossing the Atlantic, until it has become an established variety throughout the apple regions of America. Yet, true to the instincts of its northern home, it refuses to give forth its excellences beneath the unclouded skies of southern latitudes, too coy to yield to the wooing of their balmy breezes. But in our sterner climate, it finds itself at home; its ruddy cheeks glow with the brightest blushes when kissed by the rough winds of the north; under our clouded skies, and to our chilly air it yields its fine aroma and richest juices.

The fruit is exceedingly handsome, the colour being a rich, deep crimson, beautifully heightened by a light, white bloom spread over the surface. In size, it is above medium; in our climate, very smooth and fair, and the flesh white, crisp and juicy, with a fine rich, acid flavour. It ripens during the month of August, not all at once, but in gradual succession, and may be used as a culinary fruit, but its true place is at the dessert, where it pleases the eye by its beauty, and the palate with its refreshing flavours. It sells readily in our markets, taking precedence of every other apple of its season, and could doubtless be sent with profit from Canada to the markets of New York or Chicago.

The tree has proved itself to be exceedingly hardy, a vigorous and erect grower; bearing while yet quite young and very abundantly. It flourishes in nearly all parts of Canada, and even here, the fruit is, if anything, of better flavour in the colder than in the warmer districts of the country, being more juicy and not so liable to become mealy as soon as it is a little over ripe. It can be safely recommended to every planter, as a variety that is well worthy of a trial, even in the most unfavourable localities, and one that will very rarely fail to give entire satisfaction.

ON GOOSEBERRIES.

There are few places in Canada where the English varieties of this delicious fruit can be grown with success. In many gardens, however, a stunted, gnarly, almost leafless specimen may be seen in a state of bare existence, almost totally devoid of fruit. Upon these bushes probably more care and labour have been bestowed than it would take to cultivate fifty times the number of bushes of any other variety of fruit, and yet the proprietor has as yet barely had his first gooseberry tart. Now, I say to such an one take comfort, for as there is "corn in Egypt," so also may there be "gooseberries in Canada," and I will give my experience: A friend of mine, in the spring of 1869, gave me nine American seedling gooseberry suckers, with the smallest amount of roots on them. These he took from a hedge sixty feet long, and five feet wide, a dense tangled mass, so thick that no one could get his hand into it, chiefly, however, on account of the prickles. I saw at once that this was not the true method for their culture, but more of this presently. Absence from home on the part of my friend during that summer proved almost fatal to his bushes. The currant worm took every leaf off, and the next year there was no fruit. These little animals may be easily checked in their depredations by two ounces of hellebore in a pailful of water, applied either with a syringe or a watering pot. My nine slips did well the first year, and made an excellent growth that season. In 1870 the wood grown in 1869 was literally covered with fruit, and a great lot of suckers were thrown up. These I laid down in July and August, in little trenches, and covered with soil. This variety of gooseberry takes root wherever it touches the ground. By the autumn I had two hundred and fifty-five rooted layers. These I separated from the parent plant, and planted in rows as soon as the leaves fell off, and they might many of them now be layered again if more bushes were required. I kept the suckers off the original plants

this spring, and they have kept the family in gooseberry tarts and stewed gooseberries, and there are still a great many left to ripen. My method of training them is to drive a stout stake firmly into the ground, leaving it six feet high, and tying a leading shoot to it, keeping down all suckers unless required for propagation. As the main stem increases in length, side branches are thrown out, and the bush may be trained in any desired direction; but when grown in the pyramid form, the side branches should be pinched so as to induce the main stem to lengthen. The branches are very thin at first, and almost vine-like in their growth. The berry is small when compared with those grown in England; but I am convinced that propagation from seed in well enriched soil would increase the size of the fruit, as this gooseberry is derived from a very superior wild kind to that which is found in the British isles, and from which the English gooseberry originated.

There are two kinds of gooseberries in Canada—the prickly one, found in high ground in almost all our woods and clearings, and the smooth kind, which grows in most of the low alluvial deposits along creeks and in marshy places. The American gooseberry is derived from this swamp or smooth variety, and it partakes greatly after its parent, both in the appearance of its berry and the trailing nature of its branches. The bush now grown might in a few years be still further advanced by high cultivation of plants raised from seed. The main thing to guard against will be making it too tender for our climate, which I believe is the cause of disease in the English high bred sorts.

The time for layering is from the beginning of July until the end of August, but the earlier the better, as they make stronger roots, and consequently stronger plants. The way to proceed is to have the ground round the bush thoroughly loose and pulverized, and if not rich, mix with it some well rotted manure, leaf mold from the woods, or swamp muck. Make little trenches three inches deep in this soil; into these stake down with little skewers or split shingle, shoots of this year's growth (four or five may be put into trenches); bend up the top end of the layers so that it will stand as nearly upright as possible, and fix it in that position with a little loose earth pressed firmly against it. There is no difficulty, as I have before stated; they root with perfect ease.

Allow me to give another piece of advice gratis. Let all who are partial to this fruit, and who have the old country sorts in the state first described, root them out and order the "American Seedling" or the "Houghton" from the nearest nursery-man. A dozen bushes will do to start with, as they are easily increased.

P. E. BUCKE.

Ottawa, July, 1871.

WILSON'S EARLY BLACKBERRY.

For the information of members to whom plants of this blackberry have been sent by the Association, an engraving is given on the opposite page which will give them a very good idea of the appearance of this fruit.

It is called *early*, not because no other variety of blackberry ripens any of its fruit as early, but because the crop is all ripened up at once and wholly gathered before the bulk of the fruit of other varieties is ready to be harvested.

Whether it will prove sufficiently hardy to endure our climate can only be ascertained by actual trial, but, as it has some reputation for hardihood among our friends across the border, it has been thought it might be well in this manner to give it a trial, and ascertain its value in our own land.

The quality of the fruit has been much praised, and the appearance is certainly prepossessing. It is said to retain its colour better than most varieties after being gathered, which is a very important item in the matter of marketing the fruit. The plant has the reputation of being a vigorous grower and enormously productive.

When the cane has attained a height of three feet it should be pinched back. This will cause the lateral branches to grow strong, and if these are pinched back, so as to give the plant the form of a pyramid, it will have a very pleasing appearance, both when covered with blossoms and with ripening fruit, besides producing the best results in quantity and quality of fruit.

FRUIT IN NOVA SCOTIA.

The Secretary has received from an able and enthusiastic fruit grower, R. W. Starr,



EARLY WILSON BLACKBERRY.

Esq., residing in King's county, Nova Scotia, a most valuable and interesting letter. He says :—

"The portions of Nova Scotia best adapted to the growth of fruit, are the valley of King's and Annapolis and the western part of Hants County, on the shores of the Basin of Minas. This is owing not only to soil, but to the protection afforded by the 'North Mountain,' a range extending from Cape Blomidon to Digby Gut, shutting out the cold winds and sea fogs of the Bay of Fundy. Some good fruit is also grown in the interior of Lunenburg, Queen's and Yarmouth Counties, in situations sheltered from the sea, in some parts of Colchester and in the Island of Cape Breton, on the shores of Bras d'Or Lake."

APPLES.

"These seem to be at home in this valley (the valley of King's and Annapolis, above described,) and I know of none that have been discarded as 'tender.' Some kinds are condemned as not being suited to this climate, simply because they do not bring their full perfection of colouring and flavour—as for example, the Fall Pippin makes a fine, large, healthy tree, yielding large, good-looking fruit, but it is lacking in colour and flavour, five years out of six. Our list of apples is large, and constantly increasing by the importation of foreign trees. The leading kinds are Baldwin, Blenheim Pippin, Bishopsbourne, Broadwell, Calkin's Pippin, Chenango Strawberry, Colvert, Canada Reinette, Chebucto Beauty, Dutch Codlin Emperor Alexander, Esopus Spitzenberg, Early Bough, Flushing Spitzenberg, Gravenstein, Golden Russett, Golden Pippin, Hubbardston Nonsuch, King of Tompkins County, King of the Pippins, Pomme Grise, Porter, Ribston Pippin, Rhode Island Greening, Snow Apple, Twenty Ounce, Talman Sweet.

"Diseases of apple trees are almost unknown. There is now and then a case of frozen sap blight, and an occasional cancerous appearance about the forks of the branches of some unhealthy or neglected tree, together with winter killing of nursery stock, which latter is occasioned by injudicious cultivation.

"We have a full share of insects. The most widely diffused and most destructive is the caterpillar *Clisiocampa Americana*, but it is easily kept under by the careful orchardist. The Canker Worm, *Aisophteryx pometaria*, has been occasionally very destructive, but it seems to have some natural enemies which cut them off, as they do not continue for more than two or three years, but about that time disappear altogether. The Bark Louse, *Aspidiotus conchiformis*, is very troublesome in some localities, especially when neglected and allowed to make head. Strong alkaline washes applied in the month of June, have proved to be the best remedies. The Two-striped Borer, *Saperda bivittata*, has done some injury in many places, but is being better understood and looked after. The Codlin Worm, *Carpocapsa pomonella*, is very common, but not very injurious, except in orchards that have been mown for some time. The Fall Web Worm, *Hyphantria textor*, has been increasing for some years; it has not done much harm yet, but must be looked after.

PEARS.

"We have not been as successful with these as with apples, but the cultivation of them is increasing, and many new kinds are being introduced. As yet the Bartlett stands at the head of the list of autumn sorts. Paradise d'Automne, Beurre Bosc, Golden Beurre of Bilboa, Seekel, Frederick of Wurtemberg, Onondaga, Marie Louise, Flemish Beauty, Vicar of Winkfield, Winter Nelis, Duchess d'Angouleme, Louis-Bonne de Jersey, Rostiezer, and Bloodgood, with many other kinds, have been fruited and approved. We have the following native varieties, which rank as high with us as either of the others.

"MARIA.—This fruit was first brought into notice by the late Hon. C. R. Prescott, and named by him in honour of his wife. It originated in the garden of the late—Curran, Esq., of Windsor. Tree is hardy, small; young wood feeble, light coloured. Fruit is medium in size, round, yellow, fine grained, buttery, rich; ripens ten to fourteen days earlier than the Bartlett; quality very good.

"BURBRIDGE.—One of the oldest native pears we have. The original tree is still standing on the farm of the late Col. Burbridge, near Port Williams, and though nearly a century old, is still vigorous. Tree large, upright, young wood stout and dark. Fruit small to medium, Bergamot shaped, skin greenish yellow, bronzed in the sun, sweet, gritty,

but rich and high flavoured; ripens a few days earlier than the Bartlett; tree is hardy and prolific.

LORD CORNWALLIS.—This was grown and named by the late Benj. Woodworth, Esq., of Cornwallis. Tree medium sized, rather spreading, young wood greyish. Fruit large and handsome, pyriform, as brilliantly coloured as Frederick of Wurtemberg, but, like it, rather variable; quality good; season, October.

SUTTON'S GREAT BRITAIN.—A seedling from the Bartlett, by William Sutton, of Cornwallis. The tree is vigorous and hardy, young wood very stout, short jointed, and dark. Fruit large to very large, pyriform, slightly bronzed or russeted in patches, and sometimes with a blush in the sun. Flesh is coarse grained, juicy, good. A good market fruit, ripening ten days after the Bartlett. The tree is a great bearer.

"With regard to diseases of the pear, I may say that what is usually known here as frozen sap blight, has sometimes been prevalent. The winter of 1868, was very fatal to young trees; it was estimated that three fifths of all the young non-bearing pear trees in the Province were lost by it. The leaf blight frequently attacks the young trees in the nursery.

"Of insects, the Slug, *Selandria cerasi*, has been troublesome the past few years. Last summer I saw many trees, both pear and cherry, completely denuded of foliage by them. Wasps sometimes injure the fruit by eating holes in the finest specimens, to the great disgust of the careful amateur cultivator."

PLUMS.

"These are successfully grown in almost all parts of the Province. We have several kinds of coarse, hardy plums, which are propagated by sprouts and suckers, and on some of the old farms they may be found growing in thickets, without any cultivation, bearing heavy crops for a few years, and bidding defiance to the Curculio, but finally succumbing to the Black Knot, when they are cut down, to be succeeded by a new growth, and the process repeated. Many of these are worthy of better treatment, and will, I think, compare favourably with the vaunted Wild Goose and Miner Plum. As to the better sorts, all that have been tried seem to succeed very well. Even Coe's Golden Drop, which Downing says cannot be ripened north of 41°, has been successfully ripened in this neighbourhood, and Reine Claude de Bavay is considered one of the most profitable market sorts. I would recommend in addition to these the Nectarine, Green Gage, Bleeker's Gage, Yellow Gage, Flushing Gage, Red Gage, Lombard, Prince of Wales, Orleans, Smith's Orleans, Sharp's Emperor, Jefferson, Blue Imperatrice, White Magnum Bonum (Yellow Egg.)

The only disease is the Black Knot, which in some seasons is very troublesome, and the only remedy is to cut it off as soon as it has grown, and before it ripens, and burn it.

The only insect is the Curculio, *Conotrachelus nemuphar*, and this "little Turk," is a host in himself. The remedy is, determined and persevering war, year after year, and day after day, with sheet and mallet.

CHERRIES.

These are hardy, and usually fruit well in all sections of the Province. The old Kentish is grown in many places almost without cultivation. On the shores of Annapolis Basin, there are many quite large cherry orchards, mostly a variety of the Black Heart. They are hardy, prolific, and of good quality, and said to reproduce the same kind from seed. The kinds I would recommend are Early Purple Guigne, Mayduke, Black Heart, Waterloo, White Spanish, Black Tartarian, Downer's Late, and Starr's Prolific; the latter a native.

Starr's Prolific originated on my father's farm, Starr Point, from seed of the Waterloo. The tree is now about twenty-five years old, large, spreading, and healthy, a constant and most prodigious bearer. The fruit is medium, roundish heart shaped; colour, bright red; flesh tender, juicy, rich, brisk sub-acid. Ripens one week later than the Waterloo.

THE QUINCE.

"This does well in moist, deep soils, and the cultivation is increasing. Near the town of Annapolis Royal they have been successfully grown from the earliest times, and probably were introduced by the French.

PEACHES AND NECTARINES.

"These also do well trained against a wall. I have known some worked on the plum, and trained on a brick wall, bear heavy crops at forty years from the bud before failing. As standards, without protection of any kind, the trees are short-lived and the fruit small. Apricots fruit well in a sheltered garden, the Moor-park especially.

STRAWBERRIES.

"This fruit is grown all over the Provinces successfully, according to the care and cultivation given. I should place Wilson at the head of the list for profit, next Triomphe de Gand, Jucunda, Brooklyn Scarlet, and Agriculturist.

RASPBERRIES.

"Although they seldom winter kill, still it pays to cover the canes through the winter, as the buds come much stronger. I would recommend Hudson River Antwerp, Fastoff, Franconia, White Antwerp, and Brinckle's Orange. I know nothing about the "black caps"; do not think they have been fruited here yet.

THE BLACKBERRY.

"Not much attention has been paid to the cultivation of this fine fruit, as it grows spontaneously almost wherever allowed; by the fences, roadside, and stone heaps, wherever it is protected from cattle and sheep. A few years ago I tried the Lawton (New Rochelle), but it winter killed badly. I then made a plantation of the best wild plants I could find, and I soon noticed that I had two varieties very distinct; one had tall, strong growing, dark reddish or purple canes, the fruit varying from medium size to small, with large core. It did not improve much by cultivation, and I pronounced it worthless. The other had a feeble, almost branchless green cane, that would bend over until the tips reached the ground, and loaded with fine large fruit. I am so well satisfied with it that I have not sought for better. The only trouble is to keep it in order so that I can pick the fruit.

GOOSEBERRIES.

"The English varieties do well on the Atlantic coast and most parts of the Province, but in this valley they are apt to mildew. Houghton Seedling and Mountain Seedling are very prolific, and free from mildew.

CURRANTS.

"These used to grow everywhere and anywhere, but of late years the currant worm, *Abraxis ribearia*, has been destructive to both the currant and gooseberry. Powdered white hellebore is the only effectual remedy. The currant borer, *Prenocerus supernotatus*, is doing a good deal of injury to both currant and raspberry in some localities. The only remedy I know of is to cut out and burn all the affected parts as soon as discovered. For productiveness and quality, I would recommend Red Dutch, Victoria, White Dutch, White Grape, and Black Naples. In this climate they are better grown in stools, as the snow breaks off the side shoots and destroys the plants when grown to a single stalk.

GRAPES.

"These are generally grown here with the protection of a wall, and on the renewal system, and the bearing wood is girdled soon after the fruit is set. By this method, with the protection afforded by the south wall of his office, Dr. Hamilton, the President of our Fruit Growers' Association, was enabled to show a number of bunches of Black Hamburg at our exhibition in Wolfsville last October, which, for size of berry, perfect colouring, and exquisite flavour, excited the admiration of all present. The sorts which are best known, and which have

been grown and ripened here for many years, are of European grapes—Black Cluster, Miller's Burgundy, White Sweetwater, and Royal Muscadine; of American origin—Isabella, Diana, Concord, Delaware, and Hartford Prolific, are the most common, and have been successfully grown. Many other new varieties are being introduced, but are not yet proved.

FLOWERING SHRUBS.

"I can recommend as perfectly hardy in this locality—*Daphne Mezereum*, *Japan Quince*, *Dwarf Double Flowering Almond*, *Rose Acacia*, *Roses* of all hardy sorts, *Guelder Rose*, *Waxberry*, *Spireas*, *Syringa*, *Missouri Currant*, *Laburnum*, *Venetian Sumach*, *Lilac*, white, purple, and persian; *Ampelopsis*, *Clematis*, *Honeysuckle* of all varieties.

NATIVE APPLES.

"The following native varieties of apples are much esteemed:—

SUTTON'S EARLY, originated by Wm. Sutton, of Cornwallis, from seed of Ribston Pippin, is not yet thoroughly proved, but promises well. The fruit is large, conic, slightly ribbed, skin yellowish white, with faint russet markings around the stem. Cavity deep and narrow; stalk long and slender; flesh white, juicy, pleasant sub acid flavour; tree thrifty and spreading; young wood stout, dark and downy; season, 20th to last of August.

BISHOP'S BURNIE is another seedling of Sutton's from the Ribston Pippin. The tree is hardy, a quick grower, spreading; young wood bright and tough. It bears abundant crops of fair fruit, which is much prized for stewing and baking, as it contains a great deal of saccharine, although classed as sub-acid. Fruit is medium, roundish conical, pale yellow shaded, and obscurely splashed and striped in the sun; flesh is white, crisp; tender, juicy, mild sub-acid, slightly aromatic; season, November and December.

MARQUIS OF LORNE, a seedling from the Gravenstein, by Sutton. The tree is large, vigorous and spreading; young wood stout and dark; the foliage is large, dense and dark; blossoms are large and dark rose coloured; fruit large to very large, oblate, sometimes conic; skin smooth, yellowish white, thickly sprinkled with carmine, and splashed with broken stripes of a darker shade of the same colour; dots small and brown; cavity, wide, deep, and regular, russeted; stem short and small; basin large, ridged and irregular; calyx large, open; segments reflexed; flesh white, breaking, rather coarse grained, juicy, pleasant, sprightly sub-acid; season, November and December; very promising.

MORTON'S RED. This is supposed to be a native. It was found growing on the farm of the late Elkanah Morton, of Cornwallis. It is a moderately strong grower, with spreading pendulous branches, a very good bearer and a good market apple. Fruit medium, round, inclining to conic, and always fair; skin smooth, of a dull greyish white, nearly covered with light and dark red, through which the grey skin shows in faint striated markings; calyx rather large, closed; cavity broad, shallow, and regular; stem medium, sometimes fleshy and knobbed, in a shallow even basin; flesh white, tender, fine grained, juicy, pleasant sub-acid; season, December and January, but will keep longer."

FRUIT IN THE VICINITY OF MONTREAL.

"The alluvial terraces surrounding the mountain in this part of the Province of Quebec have long been celebrated for the growth of fruit, especially apples, and in sheltered situations for pears and plums, while small fruits are grown successfully far north of Quebec city. Of the apples which succeed best in the vicinity of Montreal, I note the following in the order of their suitability, viz: *Fameuse*, *St. Lawrence*, *Pomme Grise*, *Alexander*, *Early Joe*, *Spanish Reinette*, *Autumn Strawberry*, *Duchess of Oldenburg*, *Red Astrachan*, *Bourassa*, *Dominic*, *Ribston Pippin*, *Blue Pearmain*, *Indian Rareripec*, *Lady Apple*, *American Golden Russet*, *Keswick Codlin*, *Early Harvest*, *Primate*, and *Tetoffsky*; also, the *Montreal Beauty* and *Transcendent Crabs*. All the above do well here if proper attention is given to pruning the trees after the leaves have begun to unfold in spring; some of them towards the end of my list, if pruned in winter (as is customary here) become affected with black heart or sap canker, which

commences at the pruning, and spreads very often over the whole tree. This applies mostly to trees originated in warmer climates than ours, or rather where the winters are shorter.

The St. Lawrence apple originated in Montreal about fifty years ago, in the garden of the late Henry Schroden, from the seeds of some decayed apples thrown on a manure heap. Three other seedlings of some merit (one of them a russet), originated from the same lot; but the St. Lawrence is the only one now in cultivation, and the original tree is still alive and healthy, or, at any rate, *was* a few years ago. I have given these few particulars, as the origin of the variety is not generally known. The first Northern Spy and Early Joe apples in this Province were fruited in my grounds from trees brought from Rochester, N. Y., over 22 years ago. Early Joe fruited at five years old, and has borne regularly and profusely ever since, and is a perfect picture of health. Northern Spy fruited when fifteen years old, bearing a few apples that and the succeeding years, and then died root and branch. I have tried several trees of the same variety, with similar results. Both these varieties originated in the same orchard in New York, and both are of the finest quality; but I regret to say that Northern Spy will *not* succeed here, and we must look to you for our supplies of them, as they have already become the standard winter apple of this market. King of Tomkins County, Baldwin, English Golden Pippin, Detroit Red, Summer Rose, Early Strawberry, Maiden's Blush, Swaar, Gravenstein, Talman Sweet, Twenty Ounce, Hubbardston Nonsuch, and a number of English varieties, are not suited to this climate, while others, such as Esopus Spitzenberg, and Fall Pippin, are hardy, but very poor bearers with us.

About four years ago a succession of cold rains in the latter end of May completely killed off the apple caterpillars, which for the last fifty years have been so destructive to the orchards here as to cause many to abandon the culture of the apple altogether. The riddance of this pest has greatly stimulated the planting of fruit trees, and there have been more orchards planted during the last three years than during the ten years previous. I note these facts because it is erroneously supposed here that the protecting of insectivorous birds during the last few years has caused the disappearance of the apple caterpillar. During a close observation of twenty-five years, I have never seen an insectivorous or any other bird that would touch an apple caterpillar, and my observations are confirmed by our oldest orchardists. I do not wish to undervalue the protection of birds, but I can positively affirm that our exemption from apple caterpillars is in no way connected with such protection.

This whole subject of insect devastation is one which must in future compel the serious attention of the horticulturist. The prevalent ignorance of entomology, as practically applicable to horticulture, is deplorable. If the societies of the Dominion would apply themselves to study the conditions under which insect life prospers, they will inaugurate a new element of success in fruit culture, an element becoming every year of increased importance from the constant increase of our own minute but formidable enemies.

I may remark, however, that apple trees here, if we except the caterpillar, are exempt from many insect depredations, owing to the severity of the winters and the depth of the snow, as after a very mild winter insects here are much more numerous and troublesome.

The best time for planting fruit trees here is to take them up in the fall, heel them in for the winter, and plant out in the spring. The cold dry weather so prevalent at the commencement of winter is very destructive to fall planted trees. If the holes where the trees are to be permanently planted are prepared in the fall, and the tree laid in the same by the heels and well covered, so that in the spring it would only have to be raised to an upright position, not more than one tree in a hundred would fail.

I have planted a great number of dwarf apple trees during the last twenty-five years. With rare exceptions they succeed for a few years only. They form an enormous protuberance at the graft, and if the roots are not thrown out above the junction, the tree either dies or breaks off there. I have only one dwarf apple tree remaining (Autumn Strawberry), which is twenty-two years old, and a marvel of fruitfulness; but I know that it has rooted *above* the stock. Dwarf apples will never be a success here in a pecuniary point of view.

PEAR CULTURE.

"As this is the most northern limit for the pear tree to be grown with success, I must trespass on your patience a little by stating a few of the circumstances under which pears were formerly grown here, as contrasted with the modes of cultivation generally practised at the

present time, as they furnish some useful hints to those who may attempt the culture of the pear in the northern parts of the Dominion. The early French settlers planted in the vicinity of Montréal a great number of pear trees, of kinds that were common in Europe over a hundred years ago, such as Summer Bon Chretien, White Doyenne, Capiemont, Green Chisel, and a few early summer varieties. Many of these trees attained a great age, and grew to a large size. I have trees grafted from a Beurre Capiemont, which was cut down a few years ago in this city, the wood of which was quite sound, and it was at least a hundred years old. I had these scions grafted on perfectly hardy wild pear stocks, and yet I have had the greatest difficulty in keeping these young trees from being winter killed, in one of the most sheltered and favourable situations on the island of Montréal. Now, previous to the terrible winter of 1858-9, there were quite a number of these large pear trees about here, which bore large crops of fruit, and were, for trees of such age, in a thrifty condition; and I find from personal examination and enquiry that most of these trees were never *manured* or had the ground cultivated about them; that they made a very small annual growth, which was in consequence well ripened at the end of our short hot summers; that this small growth had a tendency to make the tree fruit early, and this early fruiting would check the redundant growth of an unusually favourable season, and enable the tree to ripen its wood as usual. Such were some, at least, of the conditions under which these fine old trees grew and prospered. Let us consider for a moment the conditions under which pear trees are planted by the million at the present day, and which *grow*, but *don't* prosper.

In the first place, the nurseryman endeavours, by high manuring and cultivation, to have his trees fit for sale at two or at most three years from the bud, and his trees are as large as they ought to be at twice that age. These frothy half-ripened things are sent all over the country. The parties who buy them read up on the subject of horticulture; they learn of the immense progress trees make with high culture and manuring, and they saturate their ground with rich stimulating manure. In a season or two the roots have got fully established, and a strong rapid growth follows, very delightful to look at, but which the succeeding winter will certainly destroy.

In consequence of this over-stimulating method of cultivation, the pear trees which looked so promising in the fall are perfectly hideous in the spring following, and if not killed outright, the half-ripened wood speedily decays, and the trees die of old age before they are out of their "teens." I have no hesitation in asserting that in this northern climate ninety per cent. of all the pear trees which are planted *and grow*, die from manuring alone; whereas, by planting in well drained ground, which has only been enriched by the rain, snow, decayed foliage, and air, pear trees will grow slowly, but they will be sound and healthy; and when they arrive at bearing condition, by top-dressing them every fall with a compost of lime, wood ashes, and bone dust, increasing the quantity as the trees bear more profusely, the varieties suitable for the climate will be sure to do well. With such cultivation as this, the trees will make a short stocky growth; they will ripen their wood, and *live* and bear fruit that any one may be proud of. In a word, successful pear growing in this northern part of the Dominion requires clean and early culture, so as to start the tree into growth, and have the wood matured as early in the season as possible, in ground sufficiently good to grow a moderate crop of potatoes. No manure (except as top dressing), pinching off the ends of all rampant growing shoots, so as to equalize the growth as much as possible, and bring the trees early into bearing. I believe such culture as this will be good for the pear tree anywhere, but in this climate it is a matter of life or death.

The following varieties, selected from upwards of three hundred, which have been procured from the best sources in Europe and America during the last twenty-five years, and tried in my grounds, have succeeded well, viz., St. Ghislain, Flemish Beauty, Oswego Beurre, White Doyenné, Osband's Summer, Napoleon, Tyson, Gansel's Bergamot, Comte de Lamy, Belle Lucrative, Doyenne d'Étè, Sieulle, Lawrence, Easter Beurré, Glout Morceau, Onondaga, Beurré d'Amalis, Brown Beurré, Beurré Langelier, Wilkinson, Doyenné Defais, Beurré Defais, Baronne de Mello, Poire de Fer, Beurré Hardy, Beurré Robin, Duchesse d'Orléans, Parsonage, Frederika Bremer, Beurré d'Anjou, Passe Colmar, Louise Bonne de Jersey, Howell, Graslin, Jalousie de Fontenay, Supreme de Quimper, Henkel, Dana's America, Augustus Dana, Dana's Hovey, Adams, Fondante Charmeuse, Mollet's Guernsey Beurré, Eliza d'Heyst, Vezouziere, Walker, Hacon's Incomparable, Bezy de Montigny, Summer Bon Chretien, Inconnu Van Mons, Rostiezer, Ananas, Winter Nelis, Dr. Trouseau, Beurré Ben-

nert, Urbaniste, St. Michael Archange, Poire de Nieve, and a few others not identified; also, Heatheot, Steinmetz, Ne Plus Meuris, Capiemont.

Of those that are unsuitable, after having been tried two or three times, both as dwarfs and standards, are the following, viz., Seckel, Sheldon, Buffam, Stevens' Genessee, Brandywine, Jargonelle, Winter Orange, Cattillac, Omar Pasha, Beurre Duhaume, Chaumontel, Beurre Giffard, Poire d'Avril, Belle de Noel, Dunmore, Prince's St. Germain, Conseilleur de la Cour, Beurré Gris d'Hiver, Delices d'Hardenpont of Belgium, Triomphe de Jodoigne, Beurré Superfin, Bezi de la Motte, l'ergamotte d'Esperen, and a number of foreign varieties very little known in this country, of which not a vestige is left.

Of those which have partially succeeded under very favourable circumstances, may be mentioned:—Beurré Diel, Columbia, Soldat d'Esperin, Bartlett, Beurré Clairgeau, Deux Sœurs, Duchesse d'Angoulême, Catinka, Surpasse Virgalieu, Pratt, Petrie, Nouveau Poiteau, Kingessing, Dana's Excelsior, Abbots' Shawmut, Dana's Admirable, Jones' Lodge, Shepherd, Gansel, Seckel, Doyenne Boussock, Williams' Early, Pound, Beurre d'Arenberg, Marie Louise, Dearborn's Seedling, Paradis d'Automne, Doyenné Dillen, Niles, Abbe Mongein, Benoist, Belle Epine Dumas, Beurré Kennes, River's Winter Beurré, Beurré Goubault, Beurré Bretonneau, Bezi des Veterans, Bishop's Thumb, Blanc Perne of Langelier, Bloodgood, Bon Chretien Fondante, Calabasse Tougard, Gansel's Late Bergamot, Caen de France, Catharine Gardette, Forelle, Wilhelmina, De Lourain, Dix, Fondate de Malines, DeBayay, Swan's Egg, Philadelphia, Josephine de Malines, Beurre Bose, Beurre Montgeron, Beurre Moire, Crawford, Knight's Monarch, Croft Castle, Doyenne d'Alençon, Doyenne d'Hiver, Fondante du Comice, General Lamoriciere, Jersey Gratioli, Jaminette, Madame Eliza, Paquency, Louise de Prusse, Prevost, Rousset Stuttgart, Laure des Glymes, Thompson's Van Assche, Vicomte de Spoelberg, Vicar of Winkfield, Willermoz, Zepherin Gregoire, Beurre Burnicq. I have no doubt whatever that most of the varieties in this latter list would do well with you if cultivated in the manner before mentioned. The pear tree is such a gross feeder when once its roots are fairly established, that unless some such treatment is adopted the wood will not ripen perfectly, and the tree, instead of bearing fruit for a century, will die of mere rottenness in a quarter of that time.

"These notes on pear culture have, I am afraid, exhausted your patience, and I will make my remarks on the other fruits as brief as possible. The cultivated plum succeeds very well here, and some varieties flourish far north of Quebec city. The ravages of the curculio are, however, very great, and more recently black-knot has become very prevalent, and is now doing immense damage. Notwithstanding the assertions of Downing that black-knot prevails where the curculio is unknown, and that the curculio has done great damage without any signs of black-knot, my own observations, added to all the information I can obtain from others, goes to prove that although other insects may be found in these excrescences, black-knot is caused by the curculio alone. In my own garden, black-knot made its appearance several years after the curculio had become common. The first signs of it appeared in the year succeeding a great plum crop, and there being no plums, the apples and pears were badly bitten by the curculio. The same season small tumours began to appear on the plum trees, which next year broke into black-knots, and they have been increasing in size and numbers ever since. It seems certain that the larva remains in the tree all winter, as young plum trees taken up in the fall and removed to a distant locality where fruit trees had never been grown, were affected with tumours the following spring. Fresh tumours may also be seen extending from knots of the previous year. I have also frequently cut open these tumours very early in the spring, and found large well developed larvæ in them, larger than any I ever found in fallen plums, when the larva was evidently just about to enter the ground. The instinct of the insect seems to be modified by this change in its habits, and it will now just as naturally seek to deposit its eggs in the young wood of the plum tree as in the plums that grow thereon. In fact, we now find that when we are without plums for two or three consecutive seasons, the black-knot goes on increasing just the same, and the apples and pears suffer from the curculio very severely; the only complete exemptions are the seasons when plums are plentiful.

"Formidable as this curculio pest has now become, I believe that with our present knowledge of the insect it may be successfully combated and overcome. In the first place, the frothy, succulent growth of the plum tree, as at present cultivated, renders it very liable to attacks from the curculio. The tree should be so cultivated as to make a short, stocky

growth, and have its wood well ripened; next, all the plum trees should be grown in clay soil if possible, and by themselves, away from other fruit trees, and have all the entire surface of the ground rolled hard; then, besides jarring the trees, gathering the fallen fruit, or turning in pigs, I have gathered from four to five hundred in a morning by laying strips of cloth or canvas on the ground, or slightly raising the ends of bricks; the insects will creep under these things for safety and shelter during the night, and may be caught early in the morning.

Most of the hardy kinds, especially the slow growing kinds, will do well here if cultivated in the manner recommended for the pear tree. I may mention Green Gage, Blue Gage, Corse's Nota Bene, Admiral and Field Marshal, Diapree Rouge, Huling's Superb, Coe's Golden Drop, Reine Claude de Bavay, Bleecker's Gage, Imperial Gage, Yellow Gage, Smith's Orleans, Purple Favourite, Pond's Seedling, Sharp's Emperor, Guthrie's Topaz, Guthrie's Apricot Washington, Columbia, Red Gage, and some few seedlings raised here of great merit—one especially, rather larger than Green Gage, and considered by all who have compared them to be even superior, if possible, to that standard of excellence.

"All the Morello cherries do well here. The Dukes will live, and occasionally give a little fruit. The other kinds are useless here.

"Peaches cannot be grown, except against a wall or under glass. I have grown them very successfully in boxes or pots of a cubic foot capacity; have half a dozen holes in the bottom of the box about $1\frac{1}{2}$ inches diameter, cover the bottom with broken crockery or flower pots, and plant two year old trees there in good soil; in the spring plant them out in a border of rich soil, sinking the boxes about half their depth. In the autumn, cut away with a sharp knife all the roots outside the bottom of the box, and place the box in a shed or cellar for the winter, and in the spring plant out as before. They will bear the second season, and plentifully thereafter. Peaches may be kept in the same boxes for a dozen years under this treatment, and bear enormous quantities of splendid fruit. The only precaution needed is to have the border they are planted in of good rich soil, and properly watered.

"Quinces cannot be grown here.

"Apricots and nectarines can be grown in pots in the same way as peaches, but are more liable to attacks of the curculio.

"Strawberries do well here. The kinds mostly grown here are Wilson's Albany and Triomphe de Gand. The enormous quantities brought here from Ontario have almost put a stop to strawberry growing here for profit.

"Raspberries do well here, especially on high ground. The canes remain without protection all winter. White and Red Antwerp, Franconia, Fastolf, and Brinkle's Orange, but the latter is not so good here as White Antwerp.

"Gooseberries do passably well here. Thorough pruning, clean cultivation, and rich soil are the best remedies for mildew. The English varieties, such as Crown Bob, Red Ironmonger, Sulphur, and Warrington, do well; I have tried Houghton, but find no advantage in it to make up for its small size. All the kinds are very much eaten by the currant worm.

"Currants.—Red, white and black do well everywhere. The kinds mostly grown are Cherry, Victoria, White Grape, White Dutch, and Black Naples.

"Blackberries.—The Rochelle or Lawton has been extensively tried here, but is not satisfactory; the fruit is too acid.

"Grapes.—I have tried all the prominent varieties of out-of-door grapes; but except in very favourable seasons they do not ripen sufficiently to be worth eating; the only exception being Delaware, which is uniformly good; occasionally Rebecca and Diana are fine, the Adirondac promises well, as it ripens early, but it has not a high flavour.

"A friend has commenced a vineyard a few miles from Montreal. When in a condition to warrant my giving you the result of the experiment, I shall be happy to furnish you with any particulars of interest respecting the same.

J. H. SPRINGLE.

Montreal, June 22, 1871.

P.S.—With reference to dwarf pear trees, the only kinds that do any good on quince stocks are Louise Bonne de Jersey, White Doyenne, St. Ghislain, and Urbaniste. Many others will succeed with care and good culture, but no other kinds are worth growing as dwarfs.

FRUIT IN THE SOUTH RIDING OF KENFREW.

The Secretary received a very interesting letter from a member, Andrew Russell, Esq., resident in the South Riding of Renfrew, who seems to find a great deal of difficulty in growing our finer varieties of fruit trees. He says he has had the Fameuse or Snow Apple, Talman Sweet, and the St. Lawrence, in bearing for a number of years, and that he finds the Alexander (at least he believes it to be that variety, though he bought it under another name,) to be nearly as hardy as the crabs. A few years ago he planted an assortment of trees from Rochester, which succeeded pretty well for a few years, and the Rhode Island Greening, with one or two others, reached a bearing state; but a few adverse years came round about that period, and they nearly all perished, as indeed did most of the orchards in that vicinity. "I have since tried," he says, "a number of sorts, both on dwarf and free stocks, with very little success. The Early Harvest is always killed; the Northern Spy, the Sweet Bough, the Twenty Ounce, the King of Tompkins, the Rambo, Summer Pearmain, Wagener, Canada Reinette, Jonathan, and Ribston Pippin, fail. Notwithstanding the reputed hardiness of the Red Astrachan (if I have not been deceived in it), it has not succeeded with me. The Keswick Codlin and Golden Pippin bear, but are not thrifty trees.

"Of pear, I have tried about a dozen sorts on quince, but none of them have been a success. Some years since I had a few specimens of the Bartlett and Steven's Genessee, with careful protection. I have a few specimens mostly every year on a couple of trees, which I think are the Wilhelmine (Jaminette), a rampant grower, without protection. I have about half a dozen trees on the thorn, which give a few fruits, but are gnarly and small. I have not succeeded with plums; the Jefferson, Washington, and others fail; the Reine Claude de Bavay, the Imperial, and a blue plum would, for some years, yield a few fruits, and then perish. The Black Tartarian Cherry, the Mayduke, and other sorts on the Mahaleb, have been a failure. The quince is always killed down."

The gentleman who has favoured us with this information, has given us the results of his own trials. The spare moments snatched from business cares have been devoted to his garden, and he has cared for his fruit trees with his own hands. To this fact he very modestly attributes much of his want of success; but we feel confident that the thoughtful care of one who labours with a love among his fruit trees, is more worth than the self-confident skill of many a professional gardener trained in the school of another climate.

Our correspondent's soil varies from a clay loam to a sandy loam; the growth of his trees is always good, and he thinks possibly too good, as a graft or bud will rise the first season from three to six feet.

He says he has had better success with grapes, and has grown them for upwards of twenty-five years; eight sorts comprise his present assortment. We regret that we cannot state what sorts they are; but we hope to hear again from this enthusiastic lover of fruit culture, and be able at some future time to lay before our members a more detailed account of his experiments. The labours and the record of their results of such a careful and observing cultivator, are a guide to others whose lot is cast in a like unfavourable climate; and we only wish that the gentlemen who, with a love of fruit culture that knows no chill despite the bitter frosts of our Ottawa region, are devoting their energies, stimulated by experience, to ascertaining those varieties and methods of culture that shall enable them to gather fruit from their own gardens, would favour us with more frequent communications.

FRUIT AT ST. JOHN, NEW BRUNSWICK.

From correspondents resident at St. John, we learn that owing to late spring and early autumn frosts, and the summer fogs from the sea, but few fruits succeed in that part of New Brunswick. The country about St. John, and for fifty miles inland, is very rocky and barren, and when the wind is from a southerly direction, it never fails to bring with it a thick sea fog, that is fatal to nearly all kinds of trees and shrubs.

Plums and Siberian Crabs are the only fruit trees that do well; the plum is free from the black-knot as far inland as the fog reaches; beyond that they are badly affected.

Raspberries and Strawberries do very well. The English kinds, which do not stand well in the United States, do as well as any other, if not better.

Currants and Gooseberries all do well, but they suffer from the saw-fly, though not from the mildew, which is so fatal to the gooseberry in other places. A high, dry atmosphere is no doubt favourable to the mildew. These are all the fruits that have the least chance of succeeding about St. John.

The list of flowering shrubs is also very limited. They are the Lilacs, Syringas, Weigelas, Spireas, Mezereon, and Viburnums. English White Thorns do well if planted where water cannot lie and freeze around the stems.

The foregoing remarks apply only to the east and south sides of the Province. On the north-west side the land is said to be good and the climate fine, with good apple orchards, and there also some varieties of grape vines do well.

MAMMOTH CLUSTER RASPBERRY.

The accompanying engraving is a good representation of this Raspberry, which has enjoyed such a high reputation where it has been cultivated, that the Directors thought it might prove acceptable to the members of the Association.

It has been claimed for this variety, that it is most wonderful in productiveness, in size and uniformity of fruit, stockiness and hardiness of plant; that, indeed, it is perfectly hardy,



MAMMOTH CLUSTER RASPBERRY.

having endured unharmed most severe winters, with the mercury down to *twenty-eight degrees below zero*.

The plant is a strong, upright grower, having comparatively few thorns, but by no means exempt from them. The fruit is large and keeps its size to the last; black, with a rich, purple bloom, very juicy, high flavoured and excellent; sufficiently firm to carry well to market, and ripening the latest of the family, excepting always the autumn-bearing sorts.

In a short time the reports coming in from members from all parts of the country will settle the value of this berry for cultivation among us, and the labours of those who are now planting and testing those fruits will be the heritage of those who shall come after them.

GOOSEBERRY MILDEW.

To the Secretary of the Fruit Growers' Association of Ontario.

SIR,—At the last meeting of our Association, held at Hamilton, I was requested to give some explanation of gooseberry mildew. I had not then given the subject those close microscopical observations which I have since done. These are quite at your service in case you feel disposed to include them in your annual report; they are as follows:—

I have frequently been defeated in securing a crop of gooseberries of the foreign sorts free from fungus. These frequent failures, and the request before mentioned, determined me to proceed to a more searching study of the phenomena connected with its last development, therefore, on the 5th day of July last, I placed minute pieces of the fungus (taken from a berry just plucked) on the field of a powerful microscope, commencing at its lowest diameter, and from thence gradually increasing its power. I found this fungus to be composed of a well organized cryptogamus plant, exhibiting a vegetable growth many degrees lower in the organic scale than the berry from which it derived its supply of food. It consisted of a dense net-work of filamentous texture, interwoven in every conceivable way; along these filaments or threads were disposed vast numbers of minute seed vessels or conceptacles each containing from 4 to 8 sporangia, within which lay numerous germs. Now, these conceptacles were constantly maturing, bursting open and sending forth germ life to the air in vast numbers invisible to the naked eye, possessing the power to increase to a marvellous extent, and in a very short space of time. It is quite credible that in this way it might soon form an environment, in which the surface of every berry and leaf would become bathed, for by the slightest motion of the air these germs are wafted. When we consider them capable of sustaining vitality under extreme heat or cold, (for this has been verified by the experiments of both German and English scientists in their recent experiments to test spontaneous generation), it would almost appear from this to be a law that the more elementary the organic structure, the more difficult it becomes to destroy its vital properties under extreme conditions.

Now, our gooseberry cryptogam increases its size and form by extension of cilia or extremely fine threads, branching, overlapping, and reaching in all directions, where food is most abundant and suitable, not unlike the spread of mushroom spawn, so that in fact the depth of net-work or the density of the fungus will entirely depend on the thickness of the medium through which it passes and the quantity of suitable food supply. Mildew, therefore, in itself is not the cause of disease, but acts as a mere scavenger in the removal of matter unsuitable for the development of higher organic forms. It can only lay hold of refuse matter. I consider fungi as important in the economy of nature as the higher organic forms, and I would not willingly be guilty of charging those simple structures with the crime of creating disease in the more complex organism, any more than I would the crow for the death of the horse upon which he feeds.

Mr. J. N. Jones, of Charleston, ten years ago, observed that before a "fungus made its appearance, and before any trace of it could be observed under a high magnifying power, the surfaces put on a peculiar glazed appearance." Now this in the case of the gooseberry, arises from its own exudation becoming condensed upon the surface. Fruits, like leaves, undergo continual evaporation. If from any cause this exuded gooseberry vapour, which contains the elements of sugar, becomes condensed at the surface, it forms into a glaze (constituting the essential food), which soon becomes, when exposed to the action of sunlight and

air, chemically decomposed; the thickness of the glaze will depend upon the quantity of vapour and period of condensation. I have observed that when mildew makes its appearance both fruit and leaf appear affected, condensation taking place when the air becomes suddenly raised in temperature; all cold bodies which it surrounds are at once converted into condensers in the same way as a tumbler of ice-water will condense aqueous vapour held in the air, and deposit it upon its outer surface on a hot day. The operation of this same law would cause the berry (all other things being favourable) to be covered by its own excretions, which deposit would differ in point of quality, essence, and chemical composition, from ordinary air condensation, and also, to an appreciable extent, in one variety of gooseberry from another.

I cannot now dwell on any further explanation of this, but must proceed to explain the further appearance of things under the microscope. Upon submitting a small section of tissues of the inside of the skin of the berry, I also observed it to contain a net-work of filaments, with their conceptacles attached, same as that which overlay the berry; but no doubt the juices of the skin of the berry had by this time become involved in the chemical change. I am therefore satisfied that fungus does in no manner act as a parasite; but that its spores do nothing more than seize upon and take advantage of the most favourable conditions presented to them, feeding upon such excrementitious matters as are wholly unfit to supply the requirements of the fruit.

Frequent syringing of the leaves and fruit at critical changes of atmospheric temperature, with warm water, might possibly remove the food of the fungus, or make it unsuitable. It is a mere suggestion, worth a trial however.

W. H. MILLS.

GRAPES ON THE SHORE OF LAKE HURON.

The writer of this has read with much pleasure the address before the Fruit Growers' Association of Canada, at Kingston by the Rev. Mr. Burnet. Much of what the Rev. President said was true; all interesting; but when that gentleman praised the Isabella grape, he was wrong; its merits compared with many grapes we have here in the Lake Basin are as those of the common Meshannock potato compared with the Early Rose or the Pink Eye—simply better than none.

It is to be doubted if the grape is yet produced which is the best that our soil or climate (that of the Lake Basin) will grow to advantage. So far, the Ives' Seedling, the Delaware, and the Catawba, have proved best.

My object in writing this is to say that all along from Goderich to say Lyell Island, on the east coast of Lake Huron, above Southampton, there are to be found the proper conditions for grape and fruit growing and wine making.

It is well known that in Europe the best wines are produced not far from the northern limit of the growth of the vine. There is nothing to compare with the wines of Johanneberger in all the world.

On the eastern shore of Lake Michigan, as high up as Northport and Traverse, peaches, grapes and apricots grow to the greatest perfection. This is due to the influence of the waters of that lake, and their modifying influence on the harsh westerly and northerly winds. The easterly winds are tempered by the waters of Lakes Ontario and Huron. Now it seems to me that these winds (the northerly and westerly) after sweeping over both Lakes Michigan and Huron, would strike the eastern shore of Lake Huron in a much more tempered and softened state than they are when they strike the shores of Lake Michigan; while the easterly winds would be tempered by passing over the waters of Lake Ontario, and those of the Georgian Bay, as well as Simcoe.

There seems to be every encouragement for the prosecution of fruit growing on the north east, or rather the east shore of Lake Huron.

This matter of vine and fruit-growing, and wine making, is all new to the lake country. Twenty years ago the thing was not thought practicable; now you can get a better bottle (or as good a one) of champagne here than can be produced in France; and there is no good reason, in my opinion, why the light wines of the Rhine country cannot be grown and made as well in the lake country as in Europe.

I do not claim to be an expert, but have some considerable knowledge of wines and vine

culture, and a most decided opinion that the country along from Goderich and Kincardine to Lyell Island, on the east shore of Lake Huron, is the very *best* in all the lake region, and, for that matter, on the continent for growing grapes. Every acre of that land, near enough to the lake to feel its influence is, in my opinion, worth a thousand dollars for the growing of fruits, especially the wine grape.

I am an American and have no special interest in Canada, writing this only in the interest of fruit growers, who are of my guild.

Grand Island.

B.

REPORT ON GRAPES IN NORTHUMBERLAND.

The Delaware is still at the head of the list with me both for quality and for productiveness.

I fruited the Adirondac this year for the first time, and find it among black grapes what the Delaware is among light, the very best. It is with me a slower grower than the Delaware on the same soil. The latter is here a good grower on common soil.

My vineyard faces the west, on the slope of a hill. Those vines on the foot of the hill lost their leaves first by frost. The vineyard contains $4\frac{1}{2}$ acres. I have also some vines planted on a hill lying to the southeast, but these on the first named coloured earlier, and the same varieties were much larger. This, I think, must have been owing to their not suffering so much from drought and heat. All varieties ripened three weeks later this year than last.

In the fall of 1869 the Creveling ripened two weeks before the Clinton; but in 1870 and 1871 the Clinton has been a week earlier than it. All varieties are perfectly healthy so far.

I have lost the Isabella grapes this year from frost; they are too late here.

J. W. JOHNSTON,
Campbellford.

FRUIT-RAISING IN GILFORD.

I take some interest in fruit-raising, and find it both pleasant and profitable. I commenced on my farm (then mostly bush), about 11 years ago, and had this last year 300 bushels of apples, plenty of plums, some few pears, cherries in abundance, and a few grapes. I have given up the red and white currants and gooseberries; currant worms and mildew beat me. I find the people of this country buy lots of fruit trees, plant them in the most careless manner, take no care of them, let the cattle roam amongst them, and should any live for a few years, they become scrubby, unshapely things. Although we have any amount of beautiful evergreen and other forest trees none are planted. One may travel all day through this fine county, and see fine farms, fine barns, and many excellent farm houses, but no evergreens, no shade trees of any kind to shelter their homesteads. Could there be any means devised to create amongst our farmers a taste for planting trees around their homesteads and farms, our country would soon assume a much more pleasing appearance.

It strikes me very forcibly that our Agricultural Society might co-operate with the Fruit Growers' Association in some way so as to bring the subject of tree planting more prominently before the public. Could this be secured, much good might follow, and in a few years our country wear a much more inviting aspect.

Truly yours,

S. MACONCHY.

Gilford, Ont., March 1871.

WASHINGTON, May 29th.

To the Directors of the Fruit Growers' Association:—

I have been examining the buildings, gardens and grounds connected with the Agricultural Department of the United States, and have seen much that has been very interesting and instructive. With an enlarged apprehension of the value of agricultural products, and the position these occupy in the grand aggregate of national wealth, this department has been created and is now conducted with a view to the increased development of the science and

practice of agriculture. It is not designed to take the place of an agricultural college, or in any manner to give elementary instruction in the cultivation of fruits, grasses or cereals, but to furnish information based on actual experiment upon particular subjects, and to place within the reach of those who desire to make experiments the facilities for so doing. To this end an Agricultural Museum has been established, in which are collected samples of all varieties of grains, and models of fruits and root crops, from every State in the Union; so that one, by comparing the quality of the samples of any grain from Maine with the samples of the same grain from Georgia, or from any other State, may learn the respective capabilities of these States for the production of any particular grain. The same may be done in fruits, for by the untiring industry and great skill of Mr. Glover, who in more senses than one is a *model* man, very accurate models of the leading kinds of the different fruits are so arranged that one may see, at least, the external appearance of, say, the Baldwin Apple, as it grows in Massachusetts, in New York, and in Illinois, and from the size, form, and colouring, obtain a very accurate opinion of the character of the apple as grown in the several sections there represented. It was interesting to notice the changes that difference of location makes in our well known fruits, and though it is not possible to indicate precisely what changes have been made in the flavour of the fruit by these causes, yet to one measurably acquainted with fruit, the external appearance of any specimen is not a bad exponent of the flavour. And in this way, by comparing specimens of different States, one is able to form some opinion of the adaptation of any State to the cultivation of any particular variety of the apple, or of any other of the leading fruits.

So also in roots crops, taking the potato as an example, there are models, exact in form and colouring, of all the leading kinds grown in each State, and one may, in a short time, by a careful study of these samples, ascertain what are the leading varieties grown in any particular State, and how they compare in appearance with the same varieties when grown in any other State.

Besides, there is a collection of the substances which are made from a particular product, showing at a glance its economic uses. Taking petroleum as a sample it is shown there in its crude state; then as refined, with all the varieties of dyes which are obtained from it. Or a fibre producing plant is shown in the raw state, with all the products into which it can be profitably wrought. There, also, are gathered specimens of insects useful in the arts or manufactures, so arranged that their entire natural history may be learned at a glance. Take for instance the silk-producing insects; these are all brought together in a group, and of each will be found the male and female moth, then the egg, the worm in different stages of growth, the cocoon, the raw silk, and the manufactured silk.

Here, too, one may learn all that is known of injurious insects. Under the head of the subject you wish to investigate, for instance the apple, will be found a list of insects that destroy or injure the leaves, another of those injuring the bark and wood, another of those that prey upon the fruit; and of each of these insects, as far as possible, are well preserved specimens in addition to accurate drawings, showing the insect in all its stages of development, through its various metamorphoses, and how, when and where it commits its ravages, and the best known methods of prevention and cure.

Thus it will be seen there is here laid the foundation of such a collection of specimens and models and books, as will enable any student of agriculture, or horticulture or pomology, or any one interested in the manufacture of any of the products of these branches of industry, to learn by actual inspection all that is at present known in relation to these subjects, and so be able, with a clear and comprehensive understanding of the whole matter, to direct his exertions in such a way as to secure the most expeditious and most profitable results.

The same purpose pervades the operations out of doors. These are under the direction of Mr. Saunders, as able and energetic in his department as is Mr. Glover in his. And just here I may say that any one visiting this department with the desire of obtaining information, will find both of these gentlemen ready to give them every facility in their power, and politely attentive to all their inquiries. Many thanks are due to them for the kind attention which I received, and the generous devotion of their valuable time in showing and explaining the various items which were continually attracting my attention and inducing inquiry.

In the cultivation of trees and plants, at the Agricultural Department, two objects are kept in view — the one a specimen ground, in which may be found all the more prominent and valuable varieties of the different fruits, trees and shrubs, so that a visitor may see specimens

of these, as far as it is possible to have them all in this locality; the other an experimental ground, where plants, trees, fruits and shrubs are grown, not merely with the view of testing their adaptation to the climate of Washington, but also for the purpose of distribution into such of the States as may be supposed to possess the climate and soil suited to their culture. Here, just now, a large number of *Cinchona* plants are being raised, to be sent out under proper restrictions to those who are willing to undertake their culture and test their adaptation to the soil and climate where they may reside, in the hope and expectation that their successful and profitable culture may yet be established in some part of the country. In the same way a large number of tea plants have been sent out by this department, and attention directed to the culture of this plant in the United States. A new fibre-producing plant, known as the New Zealand Flax, is being introduced in the same way. The fibre from this plant is equal to the best manilla, and its introduction and successful culture in the United States would be a great national benefit. Attention has also been given to finding varieties of apples suited to the trying climate of the north west, and in the hope of supplying this much felt want a quantity of hardy varieties were last fall imported from Russia, and the scions freely distributed through the north-west for trial. The trees have been planted in the grounds of the department, and are all living, and in due time will yield scions which will be scattered through all the colder parts of the country, where it is to be hoped they will be found to be valuable in extending the list of hardy apples, beyond those ripening in the summer and autumn months.

Some experiments are being made in the raising of new varieties of fruit from seed. Just now Mr. Saunders is turning his attention to the strawberry, and conducting a series of experiments in the raising of new varieties, some of which give promise of being valuable sorts. In the Hautbois family especially there is a most marked improvement in productiveness, so that the lovers of the peculiar flavour of this family may hope to be able to gratify their utmost longings.

The grape has naturally commanded a large share of attention, and the collection of varieties is very extensive. The diseases and remedies are carefully studied, and the results of all these experiments are made known every year in the report of the able superintendent.

Nor is the beautiful overlooked. Possessed of a comprehensive view of utility, the Honourable Commissioner of Agriculture sees in the increase of knowledge of the culture of trees and shrubs an increase of taste in the adornment of rural homes, with a consequent greater attachment to home, a more widespread love of nature, more refined and elevated tastes, a more contented and virtuous people, and has caused to be planted, under the direction of the superintendent, collections of trees and shrubs, so arranged as to show the families and genera to which they severally belong, intending to have thus grouped together every species that can be grown in the climate of Washington. Here then one may have an opportunity of seeing every variety of tree, native and foreign, deciduous or evergreen, with which he may think to plant his lawn or ornament his grounds. If he wishes to select from the oaks, or elms or ashes, those trees which to his eyes are most pleasing, he has but to step across the lawn to the group of oaks, &c., and there he will find every species likely to thrive with him, and the trees planted so near to each other that a comparison of their forms, foliage, habits of growth, can be easily made; and having made a selection of those he wishes to plant, he has but to transcribe from the label attached to each tree the correct name of the variety.

The same system is carried out with the shrubs, all so grouped that the comparison of different forms in the same genus is readily made. The value of such a collection of trees and shrubs, open to examination and study by every one who may choose to look at them, in imparting correct information, enlarging and refining the taste, and stimulating the enterprise of a people, cannot be overestimated.

In closing this letter, I can but express the wish that something of the same nature may be done for our own Province of Ontario. The Fruit Growers' Association, with a zeal worthy of all praise, is doing what it can with its limited means to disseminate information on the culture of fruit, and to send out through the country new and promising varieties for trial. But it should be provided with an experimental ground, where every variety that will endure the climate should be grown, and then open, under proper regulations to prevent abuse, to the examination of every one who wishes to study the collection. Yet not only should we have such a collection of fruits, but there should also be added, in the same vicinity.

a complete Arboretum, where the Canadian may find grouped together for study and comparison every useful and ornamental tree that can be grown in our climate.

These important objects might with great advantage be incorporated in the proposed scheme of establishing an agricultural college and experimental farm for the Province of Ontario.

THE SECRETARY.

PHILADELPHIA, June, 1871.

To the Directors of the Fruit Growers' Association:—

I have been enjoying the hospitality and delightful conversation of that most thorough student and botanist, so well known to us as the able editor of the *Gardener's Monthly*. In his grounds are some fine specimens of different ornamental trees; and while the climate here enables him to enjoy a somewhat greater variety of trees, shrubs and plants than we can ever hope to carry safely through our Canadian winters, yet one will return from a visit to Mr. Meehan with new courage and a keener zest to the culture of the many beautiful things with which the Canadian may increase the comforts and attractions of his more northern home. In the first place, I am more than ever persuaded that we have not given sufficient attention to the wealth of beautiful and hardy things that are to be found growing within our own borders and native to our own soil. We have many very handsome native evergreens and deciduous flowering trees and shrubs well worthy our attention, which one needs to see gathered together and grown from home, really to appreciate their worth. Our *Cornus Florida* makes a very ornamental spring flowering tree of moderate size, and in the autumn is gay with its scarlet coloured fruit. The *Malus Coronarius*, abundant in some localities, but scarce in others, vies in beauty with the flowering thorus of our gardens. But it is not so much of these that I wish to speak as of one or two very hardy, and, as grown here, very beautiful evergreens, not native, but foreign, which should long ago have found their way into every collection in the land. Why it is that Nordman's Fir has not been planted side by side with the Norway Spruce, seems unaccountable when one sees its exceeding beauty of form, and learns that the bright green colour of the foliage is retained through all extremes of weather. In growth it is vigorous, in verdure beautiful, graceful in outline and regular in form, adapting itself to any soil, and, so far as tested, as hardy as the Norway. The other evergreen is known as the Eastern Spruce, *Abies Orientalis*, and is certainly the perfection of compact growth, and this is combined with such a graceful elegance of outline as to make it a most charming object. This also seems to be as hardy as the Norway, and is well deserving of attention from every lover of the beautiful. These two charming varieties will make a most noble addition to our list of evergreen trees.

The Japanese maples are also a very interesting collection from the peculiar form and colouring of the leaves, which give the trees a very attractive appearance. These will probably be sufficiently hardy to endure the climate of a large part of Ontario, and if so, will be a very attractive addition to our collections of maples.

Mr. Meehan has also growing upon his grounds a variety of the peach with dark blood-red leaves, which he told me was found, since the war, growing on the battle-grounds near Fort Donaldson, and its foliage is indeed an apt reminder of fields of blood.

But it would only weary the reader were I to attempt to tell of all the beautiful and interesting plants I saw. One valuable hint, drawn from Mr. Meehan's experience concerning the care of newly planted evergreens, shall close my letter. He says that evergreens often perish in the winter, while young, because their roots have not yet penetrated to a depth sufficiently great to enable them to draw from the earth a supply of moisture to enable them to replace that which is given off through the leaves. When the tree has acquired sufficient age to send its roots down below the frost, it can then draw moisture from the unfrozen ground, and so replace that which is lost; but until the roots have penetrated to such a depth, the surface of the ground above them may be mulched sufficiently to keep out the frost, and thus many a valuable and desirable evergreen be carried safely through without injury. Many have experienced something of the difficulty which is here intended to be obviated, and may be glad to try the effect of such a protection to the roots of their trees. It is easily

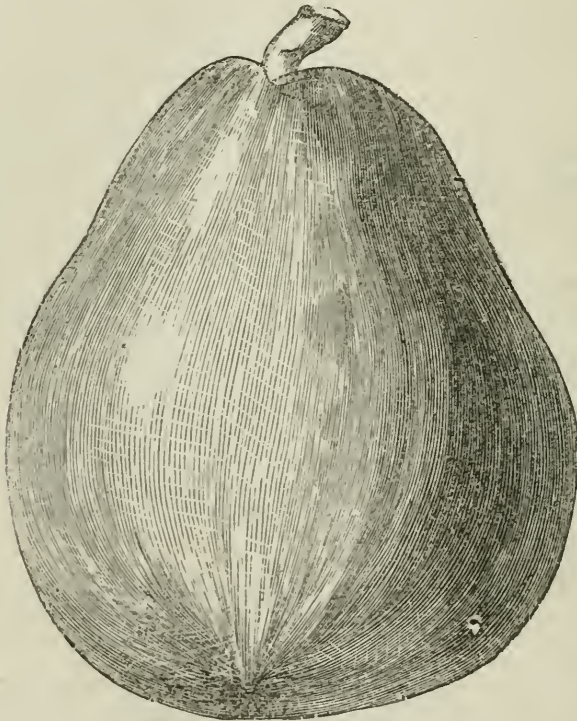
applied, and if by this means gentlemen may preserve their trees from injury until they have attained sufficient age to take care of themselves, they will be grateful for this simple suggestion.

Yours truly,

D. W. BEADLE.

THE BEURRE D'ANJOU PEAR.

Although not a new variety, having been brought to this continent some time ago, the Directors believed that what was known of its performances in America fully justified them in calling the attention of the fruit growers' of Ontario more particularly to this pear, in the expectation that it would prove to be a valuable acquisition. They were aware that it had been already planted by some of the leading horticulturists of Canada, but felt that such planting had not been as extensive as the promise of general utility warranted; they,



THE BEURRE D'ANJOU PEAR.

therefore, decided to send it out for a more thorough trial of its merits. The engraving above will give as good an idea of its appearance as it is possible to do without colouring. The pear is of large size, obtuse pyriform in shape, having a short, thick, fleshy stem, and a very small open calyx, in an exceedingly small basin, which is surrounded with russet. The colour is light green, sometimes tinged with dull crimson on the exposed side, sprinkled with russet and studded thickly with brown and crimson dots. The flesh is dull white, not very fine grained, but melting and juicy, agreeably perfumed, and of a very pleasant somewhat vinous flavour. Downing ranks it as *very good to best*. It ripens in November and December.

The tree has a very healthy, vigorous habit, growing well on both the pear and quince stock, bearing abundantly, yet with the fruit so evenly distributed as not to require thinning. It sells readily at good prices in city markets, coming in after the fall plethora is over.

PRIZE ESSAY.—AWARD.

To the Directors of the Fruit Growers' Association of Ontario:—

GENTLEMEN.—The committee appointed by the Association, to examine the Essays on Grape culture, beg leave to report.

Only one Essay on this subject was submitted to your committee, having for its motto, "I moisten the roots of all that is grown." Your committee have no hesitation in awarding the sum of fifteen dollars to the Essay, and recommend that it be published in the Annual Report of the Association.

All of which is respectfully submitted by

W. H. MILLS.
ROBT. BURNET.

Hamilton, 17th July, 1871.

PRIZE ESSAY.—SECRETARY'S REPORT.

To the Directors of the Fruit Growers' Association of Ontario:—

GENTLEMEN.—Having received from the Committee of Award the accompanying report, I proceeded to open the envelope bearing the motto mentioned therein, and found it to contain the name of P. E. BUCKE, Ottawa.

All of which is respectfully submitted.

D. W. BEADLE, *Secretary*.

PRIZE ESSAY.

MOTTO.—"*I moisten the roots of all that is grown.*"

ON THE CULTIVATION OF THE GRAPE.

The first mention of the vine made in history is to be found when "Noah began to be an husbandman and planted a vineyard" (Gen., ix. 20.) There is little doubt from this notice that anterior to this period the vine was cultivated, and probably in the garden of Eden itself. Ever since these early ages the vine has filled one of the most important places in agriculture, and on this continent and in our own Dominion, its beneficial effects are at this moment being felt. It is also, no doubt true, that, where the vine is extensively grown that fearful scourge of civilization, intemperance, is reduced to its lowest level, and the frequent use of its fruit brings health and vigour to the system. It is scarcely too much to say that, where the vine will not flourish, agriculture, as a profitable occupation, is hopeless. It is now known that in the present advanced state of horticulture, by the blending of varieties by natural and artificial hybridizing, vines may be obtained which will grow and produce profitably from the far south to those northern regions beyond the line where wheat is cultivated with success.

Although grape growing is yet comparatively in its infancy as regards the proper varieties for different soils, and locations, yet the short period of its introduction into this country, and its steady and rapid advance, augur well for its future, as one of the profitable agricultural products of Canada, and as such it should be fostered and encouraged.

Soil.—With regard to soil, the highest degree of excellence can only be obtained on a lime-stone subsoil, such as is found on the lime stone ridge of Burlington Heights from Hamilton to the Suspension Bridge, and also in many places about the city of Ottawa;—the fissures in these rocks giving the best possible natural drainage, and the lime itself being an indispensable article as food for the vine; but a gravelly subsoil underlaying a sandy loam gives also good conditions, and if a sufficient supply of black carbonaceous earth is not present, sods or swamp muck composted with stable manure should be added to the soil; what is principally wanted

and should be chiefly aimed at by the cultivator is a *warm* soil, in order that the greatest length of summer heat may be made available for the early starting of the vines in spring, and the thorough ripening of the canes in the autumn. This can only be arrived at by under-draining, as no soil can be warmed up in the spring that retains any excess of moisture. Actual experiments by the thermometer show a great difference in temperature in drained and undrained land.

It will be found more advisable to add manure to the soil from year to year by top dressing and light ploughing, or forking in, than having the ground very rich at first; these dressings should be applied either in autumn or early in spring. A very rich soil for planting not being so essential as a thoroughly pulverised one. The following is a list of soils found to be the most desirable:—Reddish clay mixed with sand—limy loamy soils—soils containing alkaline phosphates and humus—silicious and calcareous soils—gravelly clay soils rolling on the surface—clays when properly drained and limed—shales—calcareous and aluminous soils when drained thoroughly—loose limestone soils.

Planting.—The soil should be light and as fine as ashes, sifted, eighteen inches deep, to obtain which ten or twelve ploughings, and two or three times as many harrowings, will be necessary. The vines should be set ten feet apart—strong two year old plants being selected—those started from single eyes in a hot bed and removed to a rich border when three or four inches high, are the best plants to select from, the crowns should be set four inches below the surface of the soil, the roots sloping gradually downwards to about eight inches deep. This shallow planting will require the ground to be shaded, especially during the hottest part of the season. This may be done with any kind of coarse litter, such as pea-straw, long barn-yard manure, the bottom of a straw stack, spent tan, &c., but the best mulch is leaves from the forest, which may be retained in their places by a little earth being sprinkled over them. As mulching an acre or two of vineyard with these substances would be a serious task on the owner, it has been found more economical in the States where this practice is followed to sow between the rows a large kind of pea, known as the Clay or Cow Pea, and in France and the Island of Madeira the Lupin—a sort of pea, is used, the pea having a greater amount of nitrogen, and alkaline salts, than any other vegetable, is therefore more valuable as a manure or mulch to the vine. These shade the ground during the hot weather whilst growing, and are cut down when in blossom and placed over the roots of the vine. The early black pea is recommended for the more northern climate of Canada. Mr. Longworth, of Cincinnati, states that vines on dry warm soils, accidentally mulched with weeds, escaped the rot, whilst others in the same locality suffered materially.

Pruning.—Many people do not grow vines, simply from the cause that they do not understand pruning and training them, and there is such a cloud of authority on this subject that no wonder many intending planters have become confused; but the fact is, the grape, in agriculture, supplies the place in the vegetable kingdom that the horse and dog do in the animal kingdom; it is the most docile of all plants, it can be cramped in its growth to a small bush, or extended over yards of trellis, dwarfed to the ground or run over the highest buildings or trees. Pruning may be divided into two classes: summer pinching of the fresh grown shoots, and the autumn cutting of the older wood to keep the plant in shape. The method of pruning will principally rest upon the proposed system of growing the vine, either spur, renewal, fan, or arm. Having planted two-year old vines with three buds each, as soon as these burst in the spring select the two strongest, and, if no difference be detected, the two lowest, nibbing off the third, then drive two stakes into the ground in the shape of a \vee and tie the shoots to them as they grow, allowing no side branches, which should be removed so soon as they appear; the leaves only on the main stems are to be retained. These two branches should not be checked by cutting, as is sometimes the case, when they have grown from four to six feet long, as the more leaves the grape has the stronger will become the roots and the thicker the canes. After the leaves have fallen in the autumn these canes should be cut off, leaving three to four eyes on each of them. The next year the same mode may be adopted as the previous one taking care to pinch off any blossoms or fruit that may appear, as it is very injurious to the vine to let it fruit the second year after planting, unless an occasional very strong one, and then only a specimen bunch. The third year they may be fruited to the extent of one bunch to each shoot; the fourth and fifth years, if the vine has become thoroughly established, it may be allowed to bear from ten to twelve bunches every four feet of cane. It must be remembered in pinching the shoots and leaves when the vine is fruiting, that although the leaves

require all the sun they can get, the *fruit* ripens fully as well, if not better, without it. It will be noticed that all fruit is produced on the lower end of the young growing wood, and that there is seldom more than from four to five bunches on a single shoot. When the first buds break in the spring there will usually be two at the same joint; select the strongest one and nib off the weakest. All other pinching should be done during the stoning process of the berries; this lasts from three to four weeks; after they have taken their second swelling no more cutting should be done until the leaves fall. Many vineyardists are opposed to autumn pruning, and the writer favours summer pruning very highly, but where vines require winter protection—and it is believed all, even the very hardiest, are the better of it—it is highly necessary, and, in fact, indispensable that all superfluous wood should be removed before laying down the canes. At the time the fruit is stoning any stimulant in the shape of manure should be applied, and, if possible, in a liquid state; but dry manures may also be used on the surface of the soil. The greatest results have been obtained by the application of hen manure—no doubt guano would answer quite as well—in Montreal; this fertilizer brings readily one dollar per barrel for this purpose, being chiefly used for grapes under glass, but it proves of equal value for the native out-door varieties; an inch spread over the ground before mulching gives remarkable results. The writer is not aware that the “souche,” or low stump system of training vines, has ever been practised in Canada; it is doubtful if our free-growing varieties can be curtailed sufficiently. It is estimated that an acre could be cultivated at one-third the cost on the souche method that they could on wires and high trellises. No stakes, tying, or summer pruning is required, all pruning being done in the late autumn. Short jointed varieties are recommended. The vines should be set five feet apart, and the stock or “souche” should, at the third year, be from ten to twelve inches high, with five or six branches spreading in all directions. The radiation of heat from the earth becomes of great assistance in ripening the fruit.

Training.—The third year after two-year old vines have been planted, they should have proper trellises to run upon. These may be erected on various plans, but it is believed it will be found the most economical in the end to build them of three by four pine scantling; these should be obtained from the saw mill, sixteen feet long, so that they may dry and be cut in two without waste. The scantling should be sunk two feet into the ground. Before, however, placing them in position, they should receive a good coating of gas tar, to be obtained at any gas works at little expense. The best method of application is to have the tar in an old wooden pail; set the post into it and paint, as high as required, with the stump of an old paint brush; by this means the tar penetrates into the end of the grain, and a few seconds only is required for each post. Cedar, tamarac, or other durable wood may, in some situations, be more cheaply obtained, and answers equally well. Six feet out of the ground is quite sufficient, as the vines are difficult to get at if allowed to run any higher; the posts should be set ten feet apart in the rows, and ten feet between the rows. They should stand in rows each way. One and a half inch stuff, commonly called “furring,” should be nailed along the top of the posts, and when the wires are put on, two rows of posts should be connected across the top by furrings also. The best wire to use is that which is galvanized, and any No. from 13 to 18, will answer—the larger is the most serviceable, the smaller comes a little the cheapest. The posts should be set so that the vines will be mid-way between each post in the row running north and south. A furring or wire may be run along twelve inches from the ground, and the rest of the space may be divided with two wires eighteen inches apart. When trained on the arm system, the lower arm should be twelve inches from the ground; this arm may be extended to the post, up it and across the furring to the trellis opposite; this will give the main stem of the vine room to extend twenty feet on each side, making a total of forty feet if required. This main stem should never be checked during the growing season, the laterals only should of course, be kept off; these, as in all other cases, should be removed *after* the fruit is formed, excepting in the case of young vines not yet fruited, from these they should be removed so soon as they appear. The canes from the main vines should be stopped on reaching the top of the trellis, and every time the eye at the tip of the cane bursts, one leaf should be left, the rest pinched off. The main cane must be cut back every autumn, leaving it five feet long, or to the end of the fully ripened wood, the first year the vine bears; and after that one new joint should be left on the vine every year. This cane will be of great advantage if the multiplication of the plants is required; because if four feet or five of it is buried in a trench early in the spring after the shoots

have started, filling the trench gradually to the top as they grow, good plants may be obtained that will bear fruit in from one to three years. These vines may be separated and set out after the leaves fall, or next spring and will be fully equal to two year old plants. Whether the vines are grown on the fan or the arm system, it is of the greatest importance that the outer branch should be allowed to run at will. Trellises may also be made by pointing and driving down some durable wood at the angle of forty-five.

And the fan system may be carried out on low cedar fences, constructed on purpose, having high posts and cross bars.

It is believed, however, that wire trellises, besides being the most economical in the long run, will give less trouble in tying the vines as the tendrils cling to the wires. A very simple mode of attaching the vines to the wire trellises, is extensively in use, and is as follows:— Obtain galvanized wire of the thickness of “stove pipe” wire, and a pair of “round noses,” and a pair of wire nippers; with the round nosed nippers a figure 8 is made by using the points for the small end, and the part nearest the handle for the largest end of the figure; the wire is cut off with the wire nippers, and the small end of the 8 is attached to the trellis with a tight squeeze; the larger end is put loosely round the vine, the tendrils will catch in a few days, when the wire may be taken off the vine and allowed to hang on the trellis for next seasons use.

When the first frosts begin to harden the ground, it is highly useful, even with the hardiest varieties, to lay them down and protect with a few inches of soil. Many vine growers are opposed to this practice, not having been successful, but this probably arises from the vines having been covered too early in the autumn, or uncovered too early in the spring. No time can be given for these operations, as it depends on the state of the weather and the season; but the vine should not be covered until the ground begins to freeze up for winter, or uncovered before the warm weather sets in from the 1st to the 15th of April. After the vines are uncovered in the spring, they should not be immediately tied in their places; but time should be allowed for the buds to burst, and they do so more regularly along the cane when lying down, than they do when tied up as the sap has a tendency to rush to the highest point or that furthest from the root, besides when the buds have started about an inch, the tying up and the rubbing off of those buds not required, can be done at the same time.

Picking.—It is unfortunately the case that in order to get grapes early to market, they are frequently picked before they are ripe; and, as a rule, when the ripening process has only just begun, it is usual for most varieties to change colour, from fifteen days to three weeks before they are fully ripe. It is a mistake to suppose they will ripen after they are gathered, like tomatoes, the orange lemon, and many of the small fruits. *The grape must hang on the vine until it is ripe, or it will not ripen at all.* It should not be cut until the stem turns brown and begins to shrivel. When the fruit has been ripened on the vine, it looks much better and sells for more than that gathered in an unripe condition. The fruit will be evenly coloured, and will retain its plumpness, whilst that which is unripe, will lose it after gathering. Those destined for market, should be removed from the vine with a pair of hooked scissors, made for the purpose, taking care not to rub them so as to injure the bloom. All fruit of imperfect quality, or injured by disease, should be removed, and only the finest bunches forwarded to market. No two varieties should be placed in the same box or basket, but each kind should be kept separate. Picking should be done whilst the fruit is perfectly free from damp—for this cause, dry days and warm weather, should be selected for this operation.

Packing.—They should be packed in neat pasteboard boxes, carefully labelled with the grower's name. By strict attention to selection, and the appearance of the packages and fruit, a name may soon be obtained which will be a guarantee that the packages are what they profess to be, and these will command a good price when others will be passed by unheeded. The boxes should be firmly packed, so as to prevent shaking whilst in transit to market, as the slightest friction destroys the appearance of this delicious fruit. Grapes should be kept in a dry, airy room, and, if possible, at a temperature of between 40 and 50 degrees. The earliest varieties will, as a rule, bring the highest prices. Boxes of many designs for fruit have been invented in the States, although, so far, Canada is without a representative in this respect; at least I have been unable to discover any advertisement of such in any of our agricultural papers. Some of our wood-ware manufacturers might add to their profits by the addition of the necessary machinery for this purpose. It is believed that fruit

boxes which can be procured at about ten dollars per thousand, given in with the fruit enclosed, are the best, as there is much difficulty in regaining boxes which have passed through several hands from the time they leave the vineyard, besides which, although grapes do not stain like strawberries or raspberries, yet fruit in a fresh new box always looks neater and more cleanly than it does in boxes that have been used before. The return freight on empty boxes is saved, and the commission agent is relieved from considerable trouble and annoyance. Grapes being a fruit that keeps longer than those of a softer nature, the boxes, as a rule, are not returned so promptly as those containing fruit more perishable. Grape boxes, though the better for it, do not require ventilation, as is the case with many of the small fruits, and for this reason cardboard or veneer answers better than chip or splint cases, being smoother in the interior and not so liable to rub the fruit. The boxes should be shallow, not more than six inches high. The stems of the bunches should be cut as long as possible, for more conveniently handling. A layer of vine leaves should be laid on the bottom of the box, then a layer of grapes, and so on until the box is full, laying the bunches as close as possible, and having a layer of leaves on the top, under the cover, which should be pressed down tight. When the fruit is destined to be kept for any length of time, the bunches should be cut from the vines, and laid on a floor or shelves of an airy room for a day or two, and then packed in boxes, with paper instead of leaves between them. The room should be kept at as near 40° as possible. By occasionally examining them, and removing the bad ones, they may in this way be kept in good order for several months.

Varieties.—It is a difficult matter to speak of new varieties, as it takes years to thoroughly test any new kinds, both as to climate, diseases and soil, and also with regard to their hardiness. Again, a young vine may prove a vigorous grower, and productive, with fine berries and bunches, at first, and after some years they may turn out below the ordinary standard. The Catawba, which was once so highly prized, from disease and other causes has greatly sunk in estimation, and in Canada is scarcely heard of. There is no doubt much to be done in the direction of new varieties to suit our northern climate and soil, and we have particularly to thank Mr. Arnold for what he has already done. As it is impossible to patent new varieties of fruits, it would be well that prizes should be awarded for new grapes of tried excellence, the same as is now given for apples by the "Fruit Growers' Association." This would, perhaps, stimulate exertion, and bring forward something which might be left as a footprint in horticulture to posterity. The following varieties have proved themselves so far at the head of all others that have been cultivated for the same length of time:—Concord, Hartford Proflific, Ives, Adirondac, Iona, Delaware, Canada, Creveling, Isabella, Rebecca.

FRUIT SENT TO NOVA SCOTIA.

The Fruit Growers' Association sent to Nova Scotia a box containing forty varieties of apples. In response thereto, we received from them the following report:—

REPORT OF FRUIT COMMITTEE ON APPLES SENT FROM ONTARIO FRUIT GROWERS' ASSOCIATION, 1870-71.

The box contained some *forty* varieties, and came to hand in good order and condition, some of the kinds rather over ripe and partly decayed. On the whole, they are a well-grown, well-ripened, and very high flavoured lot of apples; very far in advance of the collection sent from Ontario to our Provincial Exhibition, in 1868.

In comparison with the same sorts grown here, we find but little difference in size and colouring, but, as a general rule, the Ontario apples are the highest flavoured, and most matured; as in case of "Baldwin," which was over-ripe and partly decayed, while we can scarcely get a specimen ripe enough to eat at this season.

The names, with some exceptions, seem correct. No 24, "Hubbardston's Nonsuch," is Blenheim Pippin. The late A. J. Downing made a mistake in calling this apple "*sweet*," and his brother Charles continued it through inadvertence to all the subsequent editions of his great work. It is a pleasant sub-acid; is well known here, having been introduced some thirty years ago by the Hon. C. R. Prescott, of Accacia Grove Farm, who received the scions from the London Horticultural Society.

No. 5. Pomme d'Or. Is this a local name?

It is one of the synonyms of Golden Pippin. (See Downing, page 194.) This is a rich, high flavoured apple of the Pomme Grise class, and should be a favourite dessert fruit.

The collection of seedlings contains some very good sorts, especially No. 36 or Cowherd's "No. 3," which seems worthy of extensive trial.

Appended is a detailed list with remarks.

I am, &c.,

R. W. STARR,

Chairman of Fruit Committee.

To C. C. HAMILTON, M. D.,

President N. S. F. G. Association.

LIST OF APPLES—WITH REMARKS.

- No. 0. Pomme Grise ; true, good specimens, high flavoured.
- " 1. Fall Pippin ; true, very fine, is not first-class with us.
- " 2. Yellow Bellefleur ; true, good, high flavoured.
- " 3. Wagner ; new to us, good.
- " 4. Cayuga Redstreak ; new to us, fine, correct : Downing and Warder.
- " 5. Pomme d'Or ; don't know it, rich high flavoured.
- " 6. Bourassa ; true, good specimens.
- " 7. Golden Russet, of West New York ; new to us, fine, high flavoured.
- " 8. American Golden Russet ; seems different from ours.
- " 9. Rox Russet ; correct, fine : Downing, Warder.
- " 10. Flushing Spitzenburg ; true, good, fine specimens.
- " 11. Esopus Spitzenburg ; true, good.
- " 12. Baldwin ; true, fair size, over ripe, lost flavour.
- " 13. King of Tomkins County ; true, high coloured, good.
- " 14. Rambo ; true, good specimens.
- " 15. Vandervere ; new to us, high flavoured, good.
- " 16. R. I. Greening ; true, good specimens.
- " 17. Swaar ; true, good.
- " 18. Westfield Seek No Farther ; true, good.
- " 19. Snow Apple ; true, very rich, and fine.
- " 20. Canada Red ; new to us, don't think it agrees with Downing or Warder.—cook.
- " 21. Northern Spy ; true, well grown, partially decayed.
- " 22. Pennock ; new to us, correct : Downing and Warder.
- " 23. Fallawater ; new to us, correct Downing and Warder, very large, handsome.
- " 24. Hubbardston Nonsuch ; is *Blenheim Pippin*, good specimens.
- " 25. Mother ; may be correct, but is not the apple we have here as *Mother*.
- " 26. Fall Wine Sap ; new to us, large, handsome, over ripe, does not agree with Downing.
- " 27. Talman Sweet ; true, good Specimens.
- " 28. Dominie ; new to us, correct, Downing, good.
- " 29. Wine Sap ; new to us, correct, Warder.
- " 30. Yellow Newton Pippin ; we think this Green Newton Pippin. See Downing and Warder.
- " 31. Name unknown ; don't know it, large, handsome, pleasant, rather over ripe.
- " 32. Cowherd's No. 20 ; scarcely good.
- " 33. " " 6 ; good cooking, past season.
- " 34. " " 2 ; good, past season.
- " 35. " " 7 ; good, close fine grained, pleasant flavoured.
- " 36. " " 3 ; very good, handsome, fine flavoured, appears worthy of extensive trial.
- " 37. " " 22 ; only fair in quality.
- " 38. " " 11 ; good baking, sweet.

" 39. Freed's Seedling; very juicy, almost sweet, think it would cook well.

" 40. Land s Vandervere; don't know it, pretty good quality.

Those marked "true" have been proved here, and those marked "correct" agree with the description given by the authorities quoted.

THE CANADIAN FRUIT, FLOWER AND KITCHEN GARDENER.

To the Directors of the Fruit Growers' Association of Ontario :

GENTLEMEN,—Every fruit grower among us will hail with the greatest satisfaction the publication of a Canadian Manual of Horticulture—this satisfaction is not unlikely to be much enhanced because one of the prominent and much esteemed members of our Association is the author, and because the work is to be printed and issued to the world by a Canadian Publishing House, viz, that of Campbell & Son, Toronto.

This work I took the liberty of noticing in my annual address to the members of our association, and having recently seen the enclosed critique of this forthcoming work in a daily paper, and being deeply impressed with its importance to our country as inaugurating a new era in horticultural literature, and of the beneficial results of its dissemination among fruit growers, I have taken the earliest opportunity of bringing it under your notice.

I am, gentlemen,

Your obedient servant,

ROBERT BURNET

Hamilton, 28th Oct., 1871.

A CANADIAN MANUAL OF HORTICULTURE

We have received from the publishers, James Campbell & Son, advance specimen sheets of a forthcoming work on horticulture, by D. W. Beadle, of St. Catharines, and it is with great pleasure and confidence that we bespeak public attention to this much needed and very valuable addition to our young Canadian literature. The qualifications of the author for the task he has undertaken are an ample guarantee for the excellence of the work. His long practical acquaintance with the subject in all its branches, his constant intercourse with the foremost horticulturists in this country and in the United States, as well as in Great Britain, and the experience gained from his connection with the press give him peculiar fitness for the office of a teacher and a guide in Canadian horticulture.

There are many excellent manuals for the gardener, but hitherto no work on the subject has been published by a Canadian, and the special value of the forthcoming volume is derived from the fact that it is written by one who has spent the greater part of his life in this country, and has for many years been practically familiar with the peculiarities and difficulties of our own soil and climate, and is therefore well acquainted with the peculiar position and wants of the Canadian cultivator.

The title of the new publication is the "Canadian Fruit, Flower and Kitchen Gardener," a title which correctly indicates the general scope and arrangement of the work. It is adorned with three beautiful coloured engravings, appropriate to each of the principal departments of which it treats, and is throughout profusely illustrated with explanatory wood cuts, which are accurately and clearly executed.

The following brief summary of the contents will give a fair idea of the full and practical information, and the varied range of subjects, which the work will embrace. Under the first part—or the Fruit Garden—are chapters on the propagation of fruit trees (including grafting and budding,) pruning, transplanting, mulching, treatment of young orchards, location of an orchard, injurious insects, and the production of new varieties; then follow chapters on individual fruit adapted to this climate, with special attention to the cultivation of the grape both in the open air and under glass. In the second part, all the vegetables which can be successfully grown in Canada come under notice. They are arranged in alphabetical order, and all requisite information is given concisely but fully for the cultivation of each. The third section—The Flower Garden—treats of the more strictly ornamental department of Canadian

horticulture in the following order: Hardy flowering shrubs, Hardy climbing shrubs, Hardy herbaceous flowers, Bedding plants, Annuals, and Roses.

We shall look with much interest for the completion of the work and its speedy publication, and cordially recommend it to all Canadians who love a garden, and who would be aided in its cultivation by the ripe experience of a thoroughly practical and accomplished horticulturist, who is at the same time a fellow-countryman.

PAPERS READ BEFORE THE ASSOCIATION.

THE GARDEN AND THE FARM.

BY A. B. BENNETT.

There is no pastime so pleasant and attractive for persons, who, during their early manhood have been engaged in business or professional pursuits, in most cases confined to the dull atmosphere and routine of a business office—I repeat there is no occupation more inviting to persons at this middle stage of life, no matter how they may have been previously occupied, than the garden and the farm.

To be released from a monotonous routine and close atmosphere, to walk out at perfect liberty and enjoy the free air; the eye, in one sense, the purveyor of the soul, captivated at a glance the green fields; the mind given up untrammelled to the pursuit of nature represented in horticultural farming, is the highest gift of God to man.

The garden is a morning pastime, the trees and shrubs, which may have been planted, pruned and cared for, by one's own hand, become identified with the family idols. Meeting them in the morning walk, every bud has a smile for you, and every flower a fragrant greeting.

The farm has its broader attractions, though not less inviting. The wide-spreading wheat fields, how interesting, from the preparation of the soil, the casting in of the seed, the springing into life, the broad green autumn carpet, so gratifying to the eye, occupying the mind through every stage of its promise of plenty, and when ripened for the harvest, giving occupation of a busy, bustling, hurrying character; an agreeable change.

The clover fields, with their wide clustering leaves—giving a soft, graceful matting to the broad acres, with what delight is the haying time anticipated—when the sweet scented clover casts its fragrance for miles around. The dark green foliage of the luxuriant corn fields, the staunch hills at stated distances, the broad blades flashing in the sunlight, front and rear ranks, dressed in parallel lines, reminding one of Prussian hosts marshalled for battle. One has not to imagine himself William the victorious to be really a farmer king. The barley fields with their graceful, drooping heads, not bowed in sorrow, but bending with a coyish nod to the farmer, promising abundance—the pea fields and the pea blossoms—the potato patch, every hill swelling out and cracking the soil with its fulness—the ample orchards of choicest fruits—the horses, the cattle, sheep—the poultry yard, each and all contribute their share of interest, and give promise of ample stores, filling the barns, the graineries, the cellar, the larder, with abundance, not only inviting, but impelling the heart to thankfulness. Such is the farm.

The embellishments of farms and gardens. The subject is not so unimportant as may at first appear, and when considered in an extended sense is worthy of more attention than is generally accorded to it. Embellishments may be considered in two classes, remunerative and ornamental. Ornamental farm buildings may be considered as embellishments while they may be more convenient and useful than those constructed without ornate character, through the influence of rural ornamentation. Persons accustomed to town or city life, generally opposed to living in rural residences, may be induced by degrees to take an interest in agriculture, tending to draw more capital into this most healthy, and, I am convinced, ultimately most remunerative of all occupations.

As to the embellishments of the garden, the garden properly laid out is itself an embel-

lishment as a whole, but if the proper taste is not displayed, and the various objects thrown together confusedly, it ceases to be so. The shape of trees, itself, is an important matter, for beauty in them, as in all shrubs and plants, is spoiled by want of arrangement. The pruning knife must be used with skill, to regulate them and other equally important matters attended to. The eye readily detects the departure from the line of beauty, and the interspersing of trees of varied outline and figure, add variety to the landscape. A long line of our luxuriant sugar maple, with sameness as to figure and height, may be quite imposing. Alternate the same with the horse chestnut or elm, and this change to variety of shape, and tint of foliage will add beauty and attractiveness.

By observation the mind becomes more or less experienced, arising from the diversity of objects observed, and the power of justly discriminating is developed, and the understanding thus instructed will acquire a knowledge with respect to form, colour, and, I might add, of all external attributes of nature.

We have within us, no doubt, an innate admiration of all created things, but *taste* is a peculiar quality of our nature *attained* by experience and cultivation, and the attainments of this peculiar quality are endless, only circumscribed by the breadth of our experience.

The line dividing the farm and the garden it is difficult to define. The plodding, old-fashioned, slow and easy mode of cultivating, or, more properly speaking, running over large tracts of land, would, a generation ago, have been fairly the definition of farming. At the present day, thanks to the public interest, and patronage of government, to both agriculture and horticulture, it is quite another thing. A thorough cultivation and enriching of a small plot of ground to its utmost capacity of production, would at any period be called gardening. Our improved and improving system of farming is only horticultural cultivation applied to agriculture, there is really no dividing line. Every farmer enjoying a portion of this peninsula of Western Canada, which is one of the choicest half acres of God's footstool, should become an horticulturist on a large scale, giving more attention, if, as a source of profit only, to the fruit orchard and the vine. A share of attention given to ornamental trees and shrubbery, encouraging at the same time a taste with the younger members of the family for the flower garden, all contributing to advance infinitely their pleasures and enjoyments crowned by God's instrumentality, through the irresistible teachings of nature, with a moral influence, no where else to be found. No farm is so attractive as when accompanied by practical horticulture, giving completeness, as well as adding pleasure, clustering a thousand pleasing associations, filling to perfection the real, as well as the ideal, picture of home.

VEGETABLE TISSUE AND FIRE BLIGHT.

BY W. H. MILLS.

MR. PRESIDENT AND GENTLEMEN,—In submitting this paper upon the subject of vegetable tissue and fire blight, I am aware that it would have been more clearly explained if accompanied by suitably enlarged diagrams and cross sections of the pear tree, so as to have aided the eye, as well as the mind, in its construction.

In the absence of so necessary an adjunct, the next best thing to be done is to explain, in some simple way, the formation of cells, which would be familiar to most of you, and at the same time convey an idea of how the vegetable cells are constructed, and how they would act under certain conditions. Let me refer you to those beautifully wrought cells in the comb of the honey bee as having analogous relations in some respects to each other. They are both vessels for liquids and fluids, and when compressed empty their contents by diffusion into adjoining cells; and if the pressure be sufficiently great, they become emptied of their contents, and their walls collapse, and are thus formed into a more compact and solid figure. It is in a very similar way the vegetable cells build up the various tissues in concentric circles from the heart wood of every tree to its bark, from year to year, as the tree enlarges by growth, and are thus annually modified by cohesion and pressure, each containing its peculiar bundles of ducts, having separate and distinct functions. What the bee does for the honey comb heat does for the vegetable.

Let us proceed, then, to point out some of the conditions which govern plant growth, and

so approach, if possible, an explanation of the phenomena of fire blight, without offering proof in detail to establish the truth of the laws of plant growth herein expressed, for they would so enlarge the bulk of this paper as to make it unsuitable for delivery before an ordinary meeting of this Association. Be it sufficient to state that these proofs have been arrived at by numerous experiments, and promulgated by the latest and best authorities. You will, therefore, observe I claim no originality, other than the arrangement of the constituents. You are, therefore, asked to take upon trust the statement of bare facts, which I feel can only carry conviction to the mind in so far as they are intelligibly expressed. Should they fail, therefore, to lead to a satisfactory explanation of fire blight, they will, at least, afford material for discussion, in which all of us are interested. Without further qualification, I will say that since vegetable tissue is the medium through which the various phenomena of life, death, vital force, and fire blight exhibit themselves, it must be obvious that at least a slight knowledge of its formation should precede the investigation of the causes which affect the tree's organization, as well as to what extent this same tissue depends upon the atmosphere on the one hand and the soil on the other for its development; and since it is not suitable to give more than a brief mention of the elements, with some of their compounds, which build up the tree in a chemical sense, I will merely say that these primary elements are, indeed, few, and consist of carbon, hydrogen, oxygen, some nitrogen, sulphur, and phosphorus.

The combination of these in definite proportions form water, starch, sugar, gums, wood, the vegetable acids, fats, oils, albuminoids, and indeed all the numberless products to be met with in the vegetable world. They constitute the destructible parts of a tree, and are subject to rapid or slow decomposition under certain conditions. By adding mineral ash to these we have the tree's entire composition, making up its whole organic matter or material. Although the proportions of the component parts of any one of these compounds may be ascertained with considerable accuracy, chemists are unable to combine these parts so as to build up a tree; this can only be accomplished by the functions of the cell, and specially to it belonging.

Now, since matter carries with it an attribute of infinite divisibility—for I cannot think of a particle of matter so small that it does not possess two halves with space between—yet I know, to assume this, is to assert that it has no beginning, and therefore no limit between matter and nothing, and that a finite thing has infinite proportions; and I also know that Sir Isaac Newton has conjectured that matter is composed of indivisible, perfectly solid particles or atoms; but if the ultimate particles of matter be perfectly solid, they cannot be pervaded; if they be incapable of wearing or separation, they can throw nothing off; and lastly, if no single atom can receive or part with anything, how can an aggregation of atoms possess a power incompatible with the nature of its component parts?

Any one taking the view of the matter that I do, will not be startled when told that the more attenuate matter readily permeates the more gross, perpetually creating modification, and that essential change of constituents we see in the multiform things of life; and that by this infinite divisibility a single drop of water may occupy a space as large as our planet. But to go back to a more perceptible condition of matter. The microscope has revealed that a certain state of organized matter presents itself in the form of minute vesicles or cells, filled with solid or liquid material. These cells and their contents are again subdivided into molecules and atoms, all of which may be reduced by chemical analysis to those very few primary elements above named. Hence an aggregation of atoms form a compound, these compounds aggregate and form a molecule, and these molecules again combine with each other and form cells, and a primordial cell (I call it primordial, because vegetable tissue or life commences with a single cell), multiplies itself by duplicative subdivisions to an aggregation of cells. This aggregation of cells, as touching our subject, is vegetable tissue; some of these have been appropriately classified by vegetable anatomists into cell tissue, wood tissue, bast tissue, and vascular tissue. It is principally with two of these, namely, cellular tissue and vascular tissue, that we are concerned. I know how difficult a thing it is to comprehend this extreme tenuity of matter, and yet it is more difficult to convey an intelligible expression of it by words. What a surprising lesson science teaches, when it demonstrates that our five good old cardinal senses cannot any more be relied on as a record to establish truth without experimental and mechanical aid. But to return to the consideration of these microscopic cells, because it is the aggregation of these that forms vegetable tissue. They are often changed greatly in shape and contents to suit various parts and purposes of the same tree, yet it is always easy to find in the matured plant, cells of the same essential form as those in the germ or seed. In some kinds of tissue

these cells cohere tenaciously, and again, in others, readily admit of separation. They contain a material called protoplasm, commonly known as sap, (which contains all the necessary vegetable nutrient), is contractile in the living cell in all young growing parts of every tree. This material is constantly changing its figure, while the granules suspended in it keep moving as in a stream of liquid; but in the maturer parts of our pear trees these cells are greatly modified.

As each part of the tree has different functions to perform, we find the cells conforming to the conditions imposed on them by the forces in the world around. We see an example of this in those which come in direct contact with the sunlight and air; they become emptied of their cell contents, their walls collapse, and by this means are formed into bark and epidermis, which has no life in itself, but stands as a shield against the forces from without for the protection of living tissue within. The most important of all the tissues lying beneath the bark, that which contains the greatest vital activity, is the one called the cellular; it forms the bed of the river through which flows the various vegetable nutrients, and is the base of all other tissues. A cross section of a limb shows the adjoining vascular tissue with its spiral, dotted tubular and sieve ducts forming the important chemical laboratory for the whole tree. Here we find the cambium, that plays such an important part in healing over any wounds the tree sustains. Here all the vegetable principles are constantly undergoing transformation from forces exerted upon them from the world around; they are supplied partly by the atmosphere through the leaf, and principally by the soil through the root. The vegetable albuminoids exist here in a liquid state. We must, however, always bear in mind that the circumstances under which the cell itself develops determine the character of its contents, although the law which governs this particular process remains still hidden. The truth of the assertion is apparent, since facts sufficient have been experienced by all of us to point out the greatest difference in the cell contents of both fluids and vegetables in seasons that vary much in moisture, sometimes quite destroying the qualities we prize so high.

The same law governs the cellular tissue, hence the formation of cells under certain circumstances, with their contents, may contain a greater proportion of one ingredient at one time than another. Is it not important to ask what the result would be to all normal growth were a considerable disturbing cause of this nature to intervene just at this most critical stage of vital activity?

I will endeavour to point out shortly what I believe the result would be. In the meantime let me remark, that, notwithstanding we bring the highest magnifying power to bear upon the membranes of these vegetable cells, it fails to reveal any apertures in their walls. Yet they do readily admit the passage of liquids, and this obviously can only take place, because the particles which compose the cell walls are separated by greater diameters, than the diameter of the particles which go through the walls.

Since I have endeavoured to point out the composition of cells, their formation and contents, and have thus given what I am aware is a very superficial view of vegetable tissue; yet, enough has been said to warrant me in proceeding to show what relation it may possibly bear to fire blight.

Taking the pear seed and observing the living germ it contains, we see the tree's most important stage. Because, it is in fact, a ready formed plant in miniature, with its tissues already organized and perfected by forces derived from its parent, in the shape of all necessary vegetable matter contained within itself, and is beside surrounded by a sufficient supply of protoplasm for its development when placed in contact with heat and moisture, up to that point of perfection, when root, stem, and leaf can independently assimilate organizeable matter from the soil and atmosphere. It may thus appear to assume at this stage an independent existence. But it is quite otherwise in point of fact; because, in addition to those surrounding influences climatic, chemical and geographical, it carries from its primordial cell a hidden force which gives it a directive agency that eventually builds up the tree in its characteristic type. This, indeed, is the great hidden law of being, not yet scientifically demonstrated. It is "the divinity that stirs within and shapes its ends."

This wonderful directive agency impressed at the moment of conception, and thereafter retained through each successive change of plant-life from aggregation of molecules, from this to the cell, from cell to germ, from germ to youth, from youth to old age, and from generation to generation, exhibits such a regular persistence in perpetuating its like, we are not surprised that a casual observation would lead one to think that types were fixed and unchange-

able. Thanks to the revelations of the microscope, chemistry and science, this phenomenon, like others, that have been solved, is about to lose its sacredness, and thus forever fail to perplex our understanding with vain surmises. We can begin to see that the physical basis of types rests upon molecular mechanism, that the aggregation of atoms is influenced and brought about by heat acting through matter. That each molecule thus built up by aggregation of atoms, becomes one grand microcosm of the whole type coming through, and subject to the arrangements of its organic parts, and of its environment. I have only sought to push this thought sufficiently far to enable me to explain the action of vegetable tissue, for it is with that I am more immediately concerned. Dr. Mayer, in one of his treatises sets forth the principle, that all the changes in the living organism lie in the forces, acting upon it from without. And Dr. Carpenter in confirmation states, that these forces are generated in living bodies by the transformation of light, heat, and chemical action supplied by the world around. By many experimental facts, Professor Tyndall has conclusively proven the soundness of these statements. Thus, we may safely conclude, that the influence of light (which is nothing more than transmuted heat) upon vegetable organism, brings about what may be considered a mode of chemical combination, between oxygen, carbon, and hydrogen, with sometimes the addition of nitrogen, sulphur, and phosphorus. Thus, their appropriation into plant growth depends upon the agency of heat as the sole organizing force.

I have stated above that the vascular tissue contains an important constituent of Pear growth, the albuminoids. Now, what is the character of these vegetable albuminoids that occupy in common with other material the cells in such vital activity?

Professor Johnston says, they contain in addition to carbon, oxygen, and hydrogen, 15 to 18 per cent. of nitrogen, with a small quantity of sulphur, and sometimes phosphorus. In the living plant they exist in a liquid state, and are highly complex in their chemical constituents. Chemistry also demonstrates that albuminoid, in a moist state, when subjected to warm air, putrefies and decomposes, and yields a large variety of products. The volatile constituents are set free, and the residue is inorganizable matter. I suppose the quantitative relation with nitrogen is destroyed. But, be that as it may, however, a strong presumptive evidence that this is true presents itself by analysis, for by applying this chemical test to the section of a dead limb produced by fire blight, the albuminoids are no longer there. The tissue has thus, by blight, been converted into a comparatively simple binary compound, suitable only for the building up of the lower organisms of life, such as the fungoids.

Now, I can readily understand this metamorphosis taking place by the surrounding influences from without. Let us enquire what some of these are? Looking over the American Horticultural records for the last ten years, we are surprised at the great quantity of writing upon this subject of fire-blight by many observers. But in the experience of all these writers, one fundamental condition is expressed, namely, allow barometric state of the atmosphere, accompanied with heat, which precedes fire-blight, namely, warm mists, fogs, rains, sometimes accompanied by lightning, following a period of drought. The effects produced on the pear tree by these most unusual conditions have given rise to fungoid, lightning and other theories. But, to my mind, the absorbent activity of the cellular tissue is put to its greatest test under these conditions, changing the normal operations of the vital forces. The active cells become dangerously gorged, extravasation takes place, chemical combinations are hurried forward locally. I say locally, because the pressure is never even on all parts of a plant. The tree being thus placed in a wet and heavy medium, is unable to exhale or evaporate its surplus moisture through the leaf to relieve itself from the extreme pressure of the atmosphere, hence the onward flow and motion of sap is arrested. The almost distinct material of the cellular and vascular tissues is forced to meet and combine chemically; heat is generated, the volatile matters are set free, and the whole organizeable material is changed from an elevated plane to a lower level, or simple binary compound, the vital process being thus locally checked, death ensues. The limb or body turns a dark colour and carbonic acid is exhaled!

In conclusion, let me remark that, this chemical change rapidly turns starch to sugar and ferment. Payer and Persoy attribute this action to a nitrogenous substance which they term diastase. They say that one part of diastase is capable of transforming two thousand parts of starch. It is now known that any albuminoid may produce the same effect. These changes are rapidly wrought in our pear trees, under the conditions before expressed. A chain of magnificent sequence may thus be traced from the inception of life to death. First, by

cohesion and aggregation of atoms to the building up of the proximate principles of life to a perfect type. Secondly, from thence to the melting away of this same type to air, through the diffusion and dispersion of these same atoms by the chemical and mechanical agency of heat, to death and decomposition.

I know some of you may ask, what possible practical effect may all this writing about atoms and tenuity of matter have to enable us to understand fire-blight. But surely that may be fairly answered by asking another, namely, if one of us received mechanical or chemical injury to our body involving life, which of two men would we prefer to treat our case? The skilful anatomist, with a fair knowledge of diagnosis, or he that understood neither anatomy nor discrimination. I need not answer, the thing is patent.

In Professor Tyndall's twelfth lecture on heat, considered as a mode of motion, the following beautiful sentiments are expressed. I think I may suitably close this paper by quoting him. He says: "To nature nothing can be added, from nature nothing can be taken away. The sum of her energies is constant, and the utmost man can do in the pursuit of physical truth, or in the application of physical knowledge, is to shift the constituents of the never varying total, and out of one of them to form another. The law of conservation rigidly excludes both creation and annihilation—waves may change to ripples, and ripples to waves; magnitude may be substituted for number, and number for magnitude. Asteroids may aggregate the suns, suns may resolve themselves into floræ and faunæ, and floræ and faunæ melt in air. The flux of power is eternally the same. It rolls in music through the ages, and all terrestrial energy. The manifestations of life, as well as the display of the phenomena, are but the modulation of its rhythm."

IMPORTANCE OF SHELTER.

BY GEORGE LESLIE, JR.

To the Fruit Growers' Association of Ontario:—

MR. PRESIDENT.—I regret that my time has been so occupied lately, that I have not been able to prepare a paper on any specific subject connected with the objects, the promotion of which this Society has in view. I, therefore, in a hurry, just jot down a few *stray thoughts* as they come uppermost in my mind, and the first that presents itself with the thermometer below zero, and fierce winds howling across the bare fields, is the

IMPORTANCE OF SHELTER.

This Society and its members have done and are doing much good in giving this subject so much prominence; and I believe that I am not over-estimating it, when I express my conviction that if the idea mooted at some of the meetings of this Society, namely—that of offering a valuable prize, a few years hence, for the farm the best and most successfully sheltered by planting, be carried out, it will be productive of more lasting good than all the other actions of this Society put together.

The fact that lasting benefits will accrue to the climate and to the soil of our country; and that its power of producing and quality of its productions, will be greatly enhanced; the beauty of its landscapes added to, and the comfort of its people promoted by "planting for shelter," in the most extended application of the term, cannot be too often or too persistently drilled into every owner or occupier of land who has sense enough to understand palpable facts.

Day by day our forests and even isolated trees are being swept away; and day by day in just the same ratio, our climate is becoming more changeable and uncertain.

Only think of the immense destruction in our forests by fires, the immense amount of timber annually made marketable; the cordwood cut and the innumerable other ways in which vast quantities of trees are used; and let us ask ourselves if the *planting* bears any thing like the proportion *it should do* to the *felling*? It must be patent to every sensible mind that it does not, and that the most evil consequences will ensue if not *remedied* in time; that *that time* has now fully come, and that recognizing this, every one should "put his shoulder to the wheel" in the matter with right good will.

Plant, PLANT, PLANT, I would say, and do not dwell too much on the order of your planting, but *plant*. Do not let a season slip by because you cannot decide WHERE to plant, but plant *somewhere*, and if the positions do not suit you, take up your trees and *transplant* them to where they will—and *add a few more*. As to *where* to plant, let me say plant your *roads and streets*; this takes no land from you, and every year your trees grow, you will be better pleased with what you have done, while you know how it is yourself, it *adds to the value of your property*. Plant along your fences, (and in this connection, let me say in parenthesis, that a “thought” strikes me that thousands of tons of *grapes* could be grown in this way, if people would only take the least trouble, on ground which is now wholly occupied with NOTHING). Plant your side hills and your hollows; plant every unoccupied nook and corner; and last, not least, plant just *everywhere you ought to*. Amongst my “stray thoughts” on this subject, I find one regarding a narrow strip of land running from one end of the Provinces to the other, crossed and re-crossed by branches running from it, containing many thousands of acres of the finest land, nicely enclosed by fencing, now entirely barren, and just the place for forest planting in the style it is done in the old country.

I refer to our *lines of Railway*. What is to hinder them being planted with such trees as the European Larch, for instance, a quick growing tree, which, in the course of a few years, would be invaluable for railway sleepers; this timber, I think, being unequalled for this purpose. If the railway companies were to take this matter up themselves and act on it, would it not be in time a source of great revenue to them? Or if it can be done, would it not be a *good speculation* for men of capital, to lease miles of railway enclosures and plant in this manner. They might not reap the benefit themselves, but it strikes me, their heirs would in time find it a “good thing.” The immense benefit from such a source accruing in the way of shelter, is undeniable. Perhaps it may be objected to this, that the view of the traveller would be obstructed, and the landscape hidden, making it wearisome travelling. To this I would say, that the planting need not be done so closely as to interfere in this way, and where there is a really fine landscape view to be seen from the line of travel, no planting should be done at all; and on the other hand there would be a real advantage gained in many places in planting so close as to shut out unsightly objects or monotonous barrenness.

To the owners or occupiers of land about to engage in planting for shelter *what varieties* of trees to plant is a most vital question. This has been so often and so well treated by more able pens than mine that I shall dwell upon it but lightly. Everything depends on the nature of the soils and positions; to be successful the proper tree must be in the proper place. What would be most suitable in one place might in another be the very opposite, in fact, a nuisance. I have seen the Silver Abele planted to the greatest advantage, and again have seen it a perfect terror to the person who planted it, from its tendency to throw up suckers. This very tendency can be made use of to hold bank sides together. The Willow can be made of service in much the same way, and by the side of streams. The Lombardy Poplar is a quick growing tree, soon attains a great height, and very seldom produces suckers. The Balsam Poplar grows to a great size, and may be planted to advantage. The Silver Maple almost stands without a rival as a quick growing shelter producing tree. The Sugar and Red Maple are handsome trees, and especially useful with the Silver Maples as street trees. The varieties of Elms are in the foremost rank for almost all purposes. The Birch is a beautiful tree, but can seldom be transplanted with success, except when very young. Nut-producing trees, such as the Hickory, the Butternut, Edible Chestnuts, Walnuts, &c., where they will severally stand the climate, ought to be planted largely, and in time their productions and their timber would be a large source of revenue. The European Larch, formerly mentioned, cannot be too extensively used.

To produce the best shelter *Evergreens* must be mixed with the Deciduous trees, allowing their branches to grow *quite to the ground*. The sight of an Evergreen trimmed, as some people will persist in doing, to a bare pole, with a tuft at the top like a flag of distress, is always to me a great eye-sore, and I cannot help mentally noting down the owner as one whose arborical education has been sadly neglected. Some of our native Spruces can hardly be excelled, such, for instance, as the Balsam Spruce, the White and the Black Spruce. The Hemlock is graceful and pretty, but has the drawback of being difficult to transplant. The Norway Spruce, however, being such a quick grower, so hardy, so readily adapting itself to almost all soils and positions, and withal such a handsome tree, must, I think, in this country,

forever stand A No. 1. The American Arborvitae or White Cedar, after once or twice transplanting, will grow almost anywhere. *Evergreen hedges*, I am happy to see, are now beginning to attract much attention, and very deservedly so from their beauty at all seasons, and the fact that they will stand any amount of *clipping* to keep them in shape, as well as the great shelter to be derived from them, especially about dwellings and gardens. Pines deserve a passing notice: of these our native Red and White Pines are not to be despised, while the Austrian and Scotch Pines are grand and effective trees when judiciously planted.

But in advocating the claims of the foregoing, one is continually met with the remark: "Oh! I cannot afford the expense." Too often this remark springs not from pecuniary poverty but from poverty of taste, of thought, of inclination, and of will "to do these things," lack of public spirit, and want of appreciation of the benefits to be derived therefrom. But for the benefit of those who really cannot afford to go to much expense in the purchase of trees, and all others "whom it may concern," let me try to give you a hint or two by which, if you will, you may do a good deal at very little pecuniary outlay, though it will take time to accomplish your object. I would advise you, then, to portion off a sufficient piece of ground, for the purpose of a little "nursery," which put into as good condition as your time and circumstances will admit of. Into this *transplant* seedlings from the woods, the swamps, or wherever you can best get them. Seeds of such kinds as you cannot get in this way can be procured from almost any seedsman, and a little experience in your "nursery" and study of nature will soon teach you how to grow them with success; or apply to your nurseryman, of whom you can procure small seedlings at a very small cost indeed. Cultivate carefully your stock in your little nursery till they are of sufficient size to transplant to the positions they are to occupy permanently, and if your heart be in the work you will find both pleasure and profit in the following out of this plan in all its stages.

THINNING OUT FRUIT.

BY REV. R. BURNET.

To an enthusiastic horticulturist, every department of his favourite art has strong attractions, and when he undertakes to illustrate any special part of it—that part doubly bulks in his estimation. We find it so with ourselves, and at the very threshold of our paper, feel inclined to utter some strong expressions regarding the importance of fruit thinning.

There are few writers on horticulture, who have not impressed this important subject on fruit-growers. Year by year, we feel more and more impressed that it is a matter that must soon engage general attention. We propose, therefore, under our present favourable circumstances, when so many fruit-growers are here assembled anew, to do our small endeavour to bring this matter before our association.

Analogy is in favour of thinning out. Our near neighbours, our vegetable growers, act largely on this principle. Whoever heard of a market-gardener leaving his onion beds unthinned? What would be the result as regards the market value if he did? What, if a bed of carrots were allowed to grow up, just as they had sprung from the hand of the sower? How carefully does the vegetable grower thin his rows, and leave space and verge enough between them to improve the growing crop? The practice of this principle plays an important part among our farmers. A. Meehi has shown the wonderful yield from *dibbled* wheat,—the saving of seed,—the product larger in quantity, finer in quality than that grown in the old fashioned way. The sample, too, he has shown really becomes finer, and larger. Turnips, root crops of all sorts, potatoes, mangel, and all crops of a like nature, have room allowed for their free expansion—and the fuller this space allowed, as a general rule, the better the products. Man himself, depends much on similar principles for the development of his comfort and happiness. Pen him closely up in a compact and narrow city, and he soon begins to deteriorate, even his physical frame soon begins to show the need there is for light, and heat, and air. Intellectually too, man stands in need of room for his spiritual developments. Indeed, it seems a common, a general law, that growing products must not be over-crowded, either in reference to the earth, or to man.

It would seem strange then, if fruit-growing was the only exception to the law. It is not an exception however. Nothing repays the fruit-grower better than a systematic thinning of his fruit. To skilled horticulturists among us, and presently assembled in our winter meeting, these views express the sentiments of the merest tyro. We are to remember, however, that views enunciated here are not so much for the good of our own individual members, who give diligent heed to all these matters, but for fruit-growers at large, who are willing to go on in the old-beaten track, and allow nature, as they say, just to do as she likes. To all such we desire to awaken in them a desire for the production of better samples of fruit, than the small gnarled specimens which they now gather from their orchards.

The consummation wished is within the reach of all, and most farmers, who are also, on a small scale, fruit-growers could successfully compete with garden experts.

How, then, it may be asked, is this end so desirable to be accomplished? There are several ways to further this object, to each of which in succession we will direct attention.

First,—There is no better method to secure good, fair, fruit than *careful pruning*.

In fact, this is one grand pre-requisite of fruit-growing. Fruit trees are apt to put forth every effort to render their tiniest twigs fruitful, and often a vast amount of energy is lost to the tree in the expenditure of this energy. Pruning relieves the tree, in great measure, of this useless effort, and vigour and sap are sent into those channels where their development will benefit both the tree and the fruit-grower.

Much beautiful and handsome fruit is lost for want of careful pruning. The heads of our fruit trees, for the most part, are allowed to grow as close as a cabbage, and the result is just what might be expected, a large and prolific crop of small fruit rewards the laziness and want of foresight on the part of the fruit-grower. Quantity, not quality is the object of such horticulturists, and they steadily attain to that goal.

A second plan, which requires as much judicious management as the foregoing one, is to whip the trees when in full flower with a long sapling.

The prodigality of nature is something astonishing, and ought to call forth our admiration and thanksgiving. What a waste, we are ready to exclaim, when we see a fruit tree clad in its snowy covering in early spring!! Where is the need of such prolificness? There's need, and there's intention too in such fruitfulness. To those of us who follow fruit-culture as a means of increasing our happiness in the contemplation of the wonders of an all-powerful and ever-working providence, we cannot but be struck at the numerous difficulties that beset the horticulturist. One winter is too open, one is too severe, another the weather is too variable—one spring has the weather too hot and parched, another too cold and damp. Every change in the atmosphere produces its change on fruit and forest trees. How needful, then, for a superabundant supply of buds and flowers to supply the place of those that may be hurt, injured, or destroyed altogether by the outward elements. In fruitful seasons, therefore, it must become the duty of the fruit-grower to counteract this fecundity. This is to be done by drubbing the over-blossomed tree with a long, slender, light sapling, and thus destroy two-thirds of the over-luxuriant blossoming.

Another, and to amateurs, a more desirable mode is to thin out the fruit with a pair of scissors, shortly after the fruit has fairly set, and fully formed. To those of us, who have climbed up the hill of competitive exhibition, the thinning out of fruit is vigorously practised, and the results are invariably. The severest thinner is generally the highest prizier. A neighbour of mine, to whom I have been indebted for many hints, assured me, that from his experience in fruit thinning, he has discovered that the aggregate weight of good fruit after thinning, is just about as great as is obtained from a large quantity of half worthless fruit. We, ourselves, are in a position to verify this statement.

Many collateral benefits arise from thinning out. It improves the tree, it, as we have seen, improves the fruit, makes the tree more continuously fruitful, for, instead of only getting a crop, perhaps, once in two years, a crop is thereby secured every year. The thinning out with the scissors, enables the fruit-grower to make direct inroads on the ravages of the apple and pear worm, of itself, no contemptible gain to pomologists.

Craving the indulgence of the members of the Association, for the manner of presenting these necessarily brief thoughts, and trusting that, however much others know better of this

subject than I myself do, they will overlook the deficiencies of the paper, and allow me to say in the words and with the very sentiment of the old Roman :

“Fungar vice cotis, acutum,
Reddere quæ ferrum valet, exors ipsa secandi.”

“I'll play the whetstone, useless and unfit
Myself to cut, I'll sharpen other's wits.”

HAMILTON, 7th Feb., 1871.

EXPERIMENTS IN THE CULTURE OF SMALL FRUITS.

BY REV. G. BELL, CLIFTON.

The position of the garden is peculiar, and in some respects unfavourable for small fruit culture. The wind in summer is often strong and scorching in its effects on vegetation. The ground had formerly been occupied by an old orchard. Many of the apple trees are still standing, probably more than half a century old, and although somewhat decayed, I do not like to remove them, as they still produce some good fruit. They must have an injurious effect both from their shade, and from their having been for many years exhausting the soil of some chemical elements of essential importance.

The soil is an unsatisfactory one, being tough when wet, and baking very hard in dry weather. It is underdrained, but perhaps not sufficiently so for soil which settles down into such a tough mass. The soil is not a poor one, but it, of course, needs peculiar treatment in the circumstances.

Manure.—The principal article used has been the cleanings of the cattle cars from the railway, consisting of sawdust mingled with the cattle droppings. To this has been added all the ashes which could conveniently be spared, and a compost consisting of very heterogeneous materials. A considerable quantity of liquid manure has been applied once or twice a year, from a cess-pit which receives the wash of the closets flushed by the water from a sink. The soil which cannot be dipped up in a liquid state, is removed and mixed in the compost heap with stable manure, grass, weeds, chip rubbish, leached ashes, soot, kitchen refuse, leaves, woollen rags, and everything else, animal or vegetable, which is capable of being so used. This produces a very good manure. I rely on bones, ashes and the liquid manure to restore the elements of which the trees have exhausted the soil. I find that the liquid manure produces a most vigorous growth on raspberries, blackberries and strawberries.

Strawberries.—The sorts tried were the Wilson's Albany and the Triomphe de Gand. The latter was soon discarded, as 250 plants of it produced about 100 berries per annum, and these small. The Wilson did very well at first, but they appear to suffer from the nearness of the trees, and are not very productive. They are perfectly hardy and vigorous in growth. A bed was prepared a year ago, after removing an old tree, by digging in leaves, manure, and bones coarsely broken on a wooden block; and last Spring plants were set in rows prepared by mixing bone dust into the soil just under their roots. The plants were placed 15 inches apart in two rows 15 inches apart, and then 30 inches to the next pair of rows; 18 or 20 inches would probably be better for such a large grower as the Wilson. The plants were with difficulty kept alive during the dry weather of the early summer, but later in the year, they made a vigorous growth and promise well for this year. To succeed in strawberry culture the ground must be kept thoroughly clean and well mulched at first planting, and at the fruiting season.

Currants.—These have not done well. They have generally made a fair growth, but the insect pests have caused disappointment. The currant worm (the false caterpillar of the *Nematus ribessii*), has been very destructive. White hellebore has proved an effectual remedy when applied, but if constant attention is intermitted for a few days, which has often to be the case, we have the mortification of finding some bushes stripped by a brood which has been hatched during the cessation of hostilities. The bushes suffer from a borer, probably the larva of a species of *Egeria*, which eats out the pith of the wood, and the bush

becomes sickly and feeble. The black currants are free from the worm, but suffer from the borer.

Raspberries.—The Belle de Fontenay were tried as a Fall-bearing sort, but proved a complete failure. They produce a prodigious growth of suckers, and these were, perhaps, not sufficiently kept down at first, and the plants may have suffered in consequence. The growth was too late in the Fall, and the berries did not ripen well; this was probably caused by the cold, heavy nature of the soil. The Red Antwerps have been grown with fair success. In size, flavour, and beauty the fruit is all that can be desired; but the tenderness of the canes makes success uncertain. They are too large and brittle to be laid down, and although sometimes passing a winter without material injury they are at other times seriously injured. The rampant growth of these requires vigorous shortening during the growth of the new canes, and their long growth in fruiting makes it difficult to keep the fruit off the ground unless they are staked. The only insect troublesome to the bush, is the girdler, (*Oberia tripunctata*), the larva of which, if allowed to bore down the stem, will certainly kill the cane. As it takes some time to do this, the mischief to the summer bearing raspberries can generally be prevented if a little time can be given to the plants at the right season, generally August. The girdled tops should be cut off, leaving no punctured pith below the cut, and carefully destroyed.

One year's experience of the Black Cap raspberry, shows hardiness and an immense growth. It promises well, and will probably be successful.

Blackberries.—The Lawton is the only variety which I have, and it has been the most successful of all the small fruits which I have tried. Complaints are often made of its want of hardiness, and of its tendency to sucker, but my experience has been the opposite of both. I have found it perfectly hardy, and producing very few suckers, and these very easily disposed off. The excessively dry season of 1868, caused a failure of fruit by drying up the berries before they were full grown. The fruit in 1869 and 1870, was very fine. Its large size, fine quality when thoroughly ripened, and long continuance, lasting from six weeks to two months, all point it out as a fruit of great value. Besides being valuable as a dessert fruit, its vinous flavour makes it the best of all berries for canning. The growing canes should be headed in at the height of four or five feet. They do well on the north or west side of a fence, and may be tied up to a nail in the fence. I have not been troubled with insects on them.

Gooseberries.—These have not been successful. Several English sorts were planted, which appeared to do well at first, but afterwards mildewed badly. A small red sort (native probably) grows vigorously, and does not suffer from mildew. The fruit is good for preserving, but the quantity is not sufficient to make it valuable. Some obtained from Mr. Beadle, St. Catharines, (I think named American Seedling) promise well, although the excessive heat of 1870, allowed them no fair opportunity of showing what they could do. The bush is vigorous, the fruit is large and abundant, of a peculiar ashy tint of green in colour. The currant worm is very destructive to the leaves of the Gooseberry, and needs attention with frequent doses of hellebore. The measuring worm has often been seen, but has not been numerous.

Other Fruits.—Although somewhat apart from the subject, I may mention some of the large fruits. *Peaches* have made a rapid growth of wood, but have produced very little fruit. The soil is evidently too tough and cold for them unless on plum stocks. *Cherries* have as yet been grown with indifferent success. *Plums* have been a failure; those which escape the curculio, decaying, drying up and falling off. One *Apricot* tree has not done well; the earliness of the fruit exposing it to the ravages of the curculio. *Dwarf Pears* have, some seasons, done well, but the trees are yet small, and have not produced much fruit. The *Apples* grown on the old trees are good, but the crops are not large.

In conclusion, I wish to draw some practical lessons from my experience :

1st. If we expect any kind of plant or bush to feed us with fruit, we must feed it. Bone dust, ashes and liquid manure are of the highest importance in fruit raising.

2nd. For all small fruits the cultivation should be very shallow, and in nearly all cases the manure should be applied on the surface. *Raspberries* will be much the better of having the surface of the ground covered with a mulch of tan-bark, and currants with one of chip rubbish. *Strawberries* should have leaves, grass, or straw.

3rd. Politicians say that eternal vigilance is the price of freedom. But the fruit

raiser will soon find that the adage is equally true in his case, whether the freedom be from noxious insects or weeds. A vigorous and unrelenting warfare must be carried on against both.

4th. We need not expect two crops to grow on the same ground. If trees are grown, not many smaller things will grow near them, and a crop of fruit and one of weeds will not be successfully raised together.

Clifton, February 6th, 1871.

REPORT ON CURCULIO-CATCHING.

BY JAMES COWHERD, NEWPORT, COUNTY OF BRANT.

I have eighteen plum trees. I commenced to catch them May 21st, 1871, with the following results:

May 21st. Morning,	-	0	Evening,	-	12
" 22nd. "	-	1	" "	-	0
" 28th. "	-	0	" "	-	16
" 29th. "	-	1	" "	-	33
" 30th. "	-	41	" "	-	28
" 31st. "	-	45	" "	-	50
June 1st. "	-	18	" "	-	22
" 2nd. "	-	21	" "	-	28
" 3rd. "	-	—	" "	-	25
" 4th. "	-	23	" "	-	38
" 5th. "	-	5	" "	-	15
" 6th. "	-	9	" "	-	2
" 7th. "	-	10	" "	-	4
" 8th. "	-	5	" "	-	5
" 9th. "	-	0	" "	-	1
" 10th. "	-	—	" "	-	2
" 11th. "	-	4	" "	-	0

From this it seems that the Curculio were most abundant from the 29th of May, until the 5th of June, a period of only eight days, and that taking the whole period there were 98 more curculio caught at evening than in the morning, or about three-fifths of the whole number were taken in the evening. This report shows the importance of looking for them at evening as well as morning, and suggests inquiry as to the probable duration of the period of their greatest activity.

FRUIT IN COUNTY OF RENFREW.

BY ANDREW RUSSELL, EQR., ARNPRIOR.

For the past ten or twelve years I have found Tolman Sweet, Alexander, St. Lawrence, and Fameuse to succeed, but most of the established varieties fail, among other noted kinds the R. I. Greening, Ribston Pippin, Keswick Codlin, Northern Spy, Red Astracan, Early Harvest, Twenty Ounce, King of Tompkins, &c., &c.

The green aphid is the main pest; and winter killing. Have succeeded best by obtaining the trees in the fall, heeling them carefully in during the winter and planting them out in the spring.

I have tried seedling pears which always fail, and most of the noted kinds on quince fail. One year a small tree of the Stevens Genessee bore about sixty or seventy large fruit, but the next year perished. I generally have a few fruit from trees grafted on the thorn every

year, it may be the Bartlett. I have generally given them some protection. During most winters the previous year's shoots are partially killed. A gentleman in this locality has from ten to twelve trees trained low as espaliers and protects in winter, which I saw this spring in full blossom and have borne for some years.

I have tried the most noted sorts of plum, but none succeed. I had hopes this spring of having the Lombard, McLaughlin, and Egg bear; they apparently came through the winter so well, but there was only a solitary blossom.

I have tried the hardiest kinds of cherry, the Mayduke, &c., for many years, but they never produced one fruit. The trees seemed always to suffer in winter.

A seedling peach raised by me bore for a few years. With careful protection they may be got to bear. The Quince do not succeed; are killed down in winter.

Strawberries do well and bear good crops. I have had partial crops of the White Antwerp Raspberry with protection in winter. The Fastolf failed. English Gooseberries only partially succeed, owing to the mildew. The Houghton and American do not mildew, and give large crops, but in my opinion are miserable things. The Blackberry plants I tried failed. The old kinds of currants succeed and are good; the new sorts promise well. An early and repeated application of hellebore destroys the worm.

I have cultivated for the last twenty-five years a black and a white grape got from an old gardener who had been with Lord Dalhousie when Governor, and cultivated in his garden at Sorel. He gave me the names, but I could not reconcile them with Downing's nomenclature. However, they succeed well, and get coloured pretty well by 1st September in good seasons. The cluster of the white grape often weighs about a pound. I have fruited the Rebecca which also succeeds. The Delaware, Diana, Hartford Prolific and Adirondac, I have on trial. The winter protection consists in laying them down and covering slightly. I allowed one vine of the black grape to remain on the trellis one winter apparently without injury.

HOW ANY ONE CAN GROW GRAPES UNDER GLASS WITH LITTLE TROUBLE OR EXPENSE.

PAPER READ BEFORE THE FRUIT GROWERS' ASSOCIATION OF ONTARIO.

Many persons would be induced to erect a small vinery for the culture of the finer varieties of foreign grapes, were it not for the great trouble attending their culture under glass in the ordinary manner, in watering, syringing, ventilating, &c., requiring the services of a professional gardener, or occupying more time and attention than the generality of persons can spare.

By adopting the following plan in erecting the vinery they will be relieved of the greater part of this trouble, and have a fine supply of delicious grapes, with no more trouble or attention than is required to grow the natural vine out of doors.

The sashes are made stationary, but so that they can be unscrewed and taken off for repairs at any time. They extend from the front wall to within a foot or ten inches of the back wall at the top, leaving an opening of ten inches wide along the top to be closed by sheet-iron ventilators in winter or when requisite, but which is kept constantly open from the time the vines are uncovered in the spring till they are laid down and covered in the fall.

The principal peculiarity is in the glazing. The glass is laid end to end without lapping or putty, and merely kept in its place by small pieces of tin, and a space of half an inch or an inch is left open between every third or fourth pane, so that all the rain that falls upon the house is distributed pretty equally over the entire house, very little running off the roof except in very heavy thunder storms. There is no ventilation whatever below, as a draught I found injurious to the vines. Any air that comes in is by these openings in the glazing, and the heated air finds vent at the top.

Last year was a very dry one, as well as this, we having no rain here for months; but the vines never suffered from the drought, though they were never watered or syringed from the time they were uncovered in spring, when it was done copiously, till they were again uncovered this spring. Nor were they the least affected either last year or this with mildew or

red spider; though previous to adopting this plan I was annually troubled with both, in spite of syringing copiously morning and evening.

My present vinery was not erected for that purpose, but for a small conservatory, and the floor was sunk about $2\frac{1}{2}$ or 3 feet, with a brick wall all round. About 12 years ago I filled it up level with good compost, and planted the vines all inside, there being no opening for their roots to extend to a border outside. It was intended principally for proving seedling vines of the foreign varieties and the newer varieties then out, with a few of the best old varieties, and in a space of 24 by 14 feet contained for several years 36 vines, which were thinned out as they were proven worthless, till it now contains 24; this is still too many, about 16 being all that could be properly grown in that space. Last year it got a liberal supply of liquid manure in spring; this year it got nothing but clear water at first, and rain as it falls, and is doing as well as last year, and vigorous enough for a house containing so many vines.

The ends of my present vinery are not glazed, having only a small window and door on each end. Were I to erect a new one I would have the ends glazed to within three feet of the ground, and would have openings in the front wall to allow the roots of the front row of vines to extend into a prepared border outside.

For those who may wish to try this plan, I would recommend the following varieties as being the most successful with me, and of the finest quality:

1. Black Hamburg.
2. Muscat Hamburg.
3. Champion Hamburg.
4. Lady Downes.
5. Golden Hamburg.
6. Bowood Muscat.
7. Buckland Sweet Water.
8. General della Marmora.

The first four are black or purple grapes, and the last four white grapes.

No. 1 is by far the most profitable and best of the blacks, and Nos. 6 and 7 of the whites. Nos. 4 and 6 are the better of artificial impregnation, as they do not set the fruit very well.

The principal trouble in following this plan, more than is required in out-door culture of the native, is the necessity of thinning the grapes on the bunches to about one-half when about one-quarter grown, to give room to the rest of the berries to swell.

JAMES DOUGALL.

WINDSOR, 3rd July, 1871.

REPORT OF COMMITTEE TO INSPECT THE FRUIT CAPABILITIES OF BRANTFORD AND VICINITY.

To the Directors of the Fruit Growers' Association of Canada.

We, the undersigned committee, appointed by your directors to make a personal examination of the country lying in the vicinity of Brantford, and report in writing as to the character of the soil and country, its capabilities for the production of fruit, its peculiar advantages and disadvantages for such culture, its present fruit production, and such other matters affecting fruit production therein as may be thought worthy of attention, beg to submit that they visited that section of country by the way of Paris, in the latter part of September.

The road from Paris passes through a fine rolling country long settled; the orchards, apparently forty or fifty years of age, indicate by their still vigorous and healthy appearance the favourable condition of the soil and climate.

The first orchards your committee visited were those of Henry Moyle and William Smith, Esqs. The apple orchard of Mr. Moyle appeared very healthy, although somewhat crowded from too closely planting, some forty years ago. This orchard is remarkable for having produced what naturalists would call a case of bud-variations; in this instance, the

singular transmutation was an old apple tree that for years had borne Spitzenburg apples upon every branch, until some four years ago, when one branch, from some unknown cause, began to bear apples of an entirely different character. This fruit was exhibited at the last winter meeting of the Fruit Growers' Association. Upon Mr. Smith's grounds we found a great variety of pears; the trees appeared remarkably healthy, and most of them heavily loaded with fine large fruit. Mr. Smith has recently planted a belt of Norway Spruce upon the north and west sides of his orchard. The prevailing soil seems to be a substantial loam, becoming light and sandy as we approach Brantford.

The Brantford Horticultural Society were holding their fall exhibition on the day of our arrival, and we had an opportunity of meeting a number of the leading fruit growers of the township, to whom we are indebted for much valuable information as to the present state of fruit culture in the adjoining country. In the show itself we saw abundant evidence of the cultivated taste of the people of the town; the display of choice green house plants and fruits would have been creditable to a much larger place.

In the afternoon we visited the country to the east of Brantford. On our right the road borders the Grand River flats, widely celebrated for the depth and fertility of the soil. Here in old times were the favourite hunting grounds of the Indian, and the natural home of the wild plum and the grape. It presents a very pleasant appearance to the eye of the passer by. The soil, which appears to be a dark sandy loam, is evidently favourable to the growth of all the leading varieties of fruit suited to the climate. Further to the north we were told that the soil was of a more adhesive character, with a larger proportion of clay, and requiring more thorough drainage to fit it for orchard culture.

The next morning we crossed the river at Brantford, and took the Newport road, passing for a considerable distance through a broken and hilly country, until we arrived at the farm of Mr. James Cowherd, a mile or two beyond the village of Newport.

His farm occupies quite an elevated position, and from the number of Indian utensils and curiosities found here, is no doubt on the site of an ancient Indian village or town. The soil is of excellent quality, varying from a rich crumbling mould to a heavy loam mixed with clay.

We spent considerable time here, highly interested in examining his numerous seedlings of the apple and the peach; many of which, from their good quality and hardy character, we have no doubt will prove permanently valuable. He has devoted considerable time and thought to the production of these seedlings, and we think his efforts to introduce new and hardy sorts native to the climate should receive some recognition from the Fruit Growers' Association.

We spent the afternoon examining the country to the south and west of Brantford; the soil generally a fertile sandy loam, and although the season has been a very dry one, the trees looked healthy and thrifty, with a fair show of fruit. We noticed, however, in all parts of the township, the extensive ravages of the codlin moth, fully one quarter of the apple crop being injured by the worm.

But little attention has yet been paid to the planting of shelter screens for the protection of orchard trees. In the few instances that came under the notice of your committee where screens had been planted on the west and north-west sides of the orchard, the beneficial effects were plainly perceptible.

The present state of fruit culture in the country surrounding Brantford is not what might be expected. With a soil and climate evidently well suited for the growth of the apple, the pear, the plum, the cherry, and the grape, your committee noted with surprise the limited number of young orchard plantations. This seems the more remarkable in view of the fact that the Buffalo and Lake Huron and Great Western Railways offer excellent facilities for sending fruit to the best markets. At present, as far as your committee could learn, no great amount of fruit is sent from Brantford by railway, the most of the surplus being disposed of in the town at low prices and without much regard to careful handling.

The farmers not only of this township but of all the fruit growing sections of Ontario, have much yet to learn as to the best methods of assorting and packing fruit, as well as planting those sorts most likely from their keeping qualities, size and colour, form, &c., to be most in demand for a distant market.

In conclusion, your committee noticed with great satisfaction the general interest expressed in fruit culture, the desire to give and receive information on the subject, manifested

by all with whom they came in contact, as hopeful signs for the future advancement of the fruit interests of the townships.

C. ARNOLD,
W. HOLTON.

REPORT.

To the Directors of the Fruit Growers' Association of Canada.

GENTLEMEN.—Your Committee on the fruit claimed to be a seedling plum, grown at Walkerhall, near Beamsville, beg to report that they visited these grounds on Monday, the 21st day of August, 1871, and at this date found but one or two specimens still remaining upon the tree, and these so nearly resembled the common Early Orleans in point of flavour that we should have no hesitation in pronouncing it such, more particularly after observing the manner of growth of the tree, and other characteristics. The fruit was medium, size round oval, suture from shallow to obscure, stem varying in length and thickness, cavity moderate, skin purplish, flesh only second rate, yellowish green. We should, as a comparison with others, only put it down as a moderately good cooking plum. We observed, beside, no black-knot upon the tree, although this disease freely exhibited itself on a tree a few yards away. And as to the freedom from attack of the curculio, which the proprietor claims as one of its distinctive excellencies, we are compelled to leave an open question to the cultivators of this particular variety.

We would, however, in this connection, beg to record our conviction that not only the appearance of the black-knot, but even the attacks of the curculio become greatly modified, and sometimes wholly suppressed by slight changes of conditions in soil and position, and other particulars.

The black-knot is sometimes wholly suppressed by peculiarity of cultivation and manuring, and the curculio by the trees hanging over water or being grown where hens and pigs have free access to the grounds, and also, in some seasons being more unfavourable than others for the protection of the crysalis and in the periodical return of its enemies. All these bear a share in the suppression, at stated periods, of this pestiferous insect, so that greatly to the surprise of the cultivator, the plum, in some seasons, will be remunerative. In view of these facts we would recommend a more diligent study of conditions.

W. H. MILLS,
ROBERT BURNET.

REPORT ON THE LAKE SHORE IN ELGIN.

To the Directors of the Fruit Growers' Association.

GENTLEMEN.—Your Committee appointed to visit the Lake Shore District of the County of Elgin, with the object of ascertaining as far as possible, its adaptability for fruit raising; beg to submit the following report:—

On the second day of September, we left London by the early train for St. Thomas, where we arrived at 8 A. M. Here we were met by Mr. J. Laing, one of the active members of our Society in that place—who by previous arrangement, had secured horses and carriage, and very kindly consented to accompany us on our trip. His thorough knowledge of those portions of the country we were to visit, and wide acquaintance with its settlers, made his presence most invaluable, both as guide in directing our course, and as a friend, to introduce us to the parties from whom we desired to obtain information, relating to the object of our visit.

The route laid out for the first day, was to drive from St. Thomas, through Yarmouth to Sparta—which is in the centre of the most extensive fruit-growing district—and to leave there, early enough in the afternoon to reach Port Stanley by night-fall. The weather was very pleasant, and the drive through one of the most charming districts which our western country contains. Along the Talbot Street road, we observed that there were very many old apple orchards, probably from 25 to 35 years old, in a fair state of cultivation, but the crop this year appeared light. We noted also, that nearly all those farmers who had not old orchards, had young ones; many of them just coming into bearing. Cherry trees were abun-

dant and thrifty—the Kentish variety very common. While some of the orchards showed evidence of care, in the way they were kept, the major part of them had a neglected look, as if the owners expected the trees to grow and produce fruit without labour, either in pruning or cultivating. In many such cases, there was evidence of premature decay; the orchards were nearly all seeded down even while quite young. The fall web worm, *Hyphantria Textor* (Harris), we found every where; we regret to see this pest becoming so wide-spread, as we fear it will soon cause much damage to orchards. The red humped caterpillar, *Notodonta Concinna*, was also very common on apple trees.

The settlers in the north part of the Township of Yarmouth, are chiefly Scotch, from Argyleshire, while those in the southern portion, are mainly Quakers, from Pennsylvania, with some few settlers from Nova Scotia. The land along here is undulating, and produces fine wheat; the crop this season was excellent. The soil on the north side of the Talbot street road, is chiefly a rich clay loam; on the opposite side it is lighter, the greater portion being a sandy loam. The land had not suffered so much from drought as in most other portions of Western Canada; this was evidenced in the rich fields of green clover of the second crop.

At Mr. Rappleege's, on the 7th concession, we saw two very fine, healthy seedling pear trees, about 20 years old, heavily laden with fruit of fair promise; these were said to bear well every year. In the same garden was a tree of the Duchesse d'Angoulême, cropping well. Peaches also were very good and fairly loaded; and there were Lawton Blackberries bearing abundantly, with no evidences of the wood winter-killing; these latter are represented as quite hardy in this section. The Whitesmith gooseberry bears well here, but the foliage had been almost destroyed by the saw fly caterpillar, *Nematus Vetricosus*.

Along the road we observed a few wild plum trees fruiting. Hickory trees were very abundant, thrifty, and well laden; and we heard of a small marsh of wild cranberries in the Township of Southwold.

On a farm belonging to Mr. Martin, was a fine orchard in bearing, chiefly Rhode Island Greenings, but the trees were being allowed to overload, and the fruit in consequence was small. The owner spoke well of the Greening; it bears well and sells readily. His Spitzenburghs yield a good crop every second year; is not troubled much with the codlin worm. In one orchard near here, we noticed that the Fall Pippin was affected with black spots.

On the 5th concession, we inspected the orchards of Mr. Benj. A. Doan. His farm is situated on a ridge, about four miles from the lake, where he is rarely, if ever, troubled with spring frosts. He raises more or less peaches every year; this season the crop was good; but his chief fruit is apples, of which he has a large orchard, mainly Greenings, Fall Pippins, and Baldwins. The fruit is sold chiefly to buyers from a distance, who visit the locality for the purpose, and realizes an average of about \$1 50 per barrel on the spot. The worm of the codling moth, he says, does not trouble his apples as much now as formerly. Kentish cherries looked vigorous here, and bear abundantly. The trunks of his trees, were more thickly covered with lichens, than is usual in well kept orchards, a result influenced probably by the nearness of the lake.

All along this ridge, which reaches about four miles, fruit seems to succeed admirably, besides apples in abundance, we saw many peach orchards with trees heavily burdened with fruit.

We next called on Mr. Merritt Palmer, also a large fruit grower along the ridge. His apple crop was lighter this year than usual. The varieties chiefly grown were, R. I. Greening, Roxbury Russet, and Spitzenburgh; and of all these he preferred the Roxbury Russet, since it brought him about double the price of the Greenings. The former he finds ready sale for at \$1 per bushel, while the price of the latter seldom exceeds 50 cts.; and if his Russets are kept over until spring, and marketed in London, he usually realizes \$1 50 per bushel for them. The Spitzenburghs are not equal in yield to the Greenings, and sell at about the same price. He does not look upon peaches as a sure crop, his peach orchard which contains about 200 trees, was originally planted with budded fruit; but a severe winter, some eight years since, killed the trees below the bud, after which they sprouted again, but the natural fruit is small and inferior. He has seeded down his peach orchard, and believes it does just as well in grass; his trees, however, did not look thrifty.

A neighbouring farm, occupied by Mr. Merriman, was next visited. He also regards peach culture as not very reliable; his crop this year was fair. The Greening, he esteems,

as the most valuable and reliable apple for cropping—he can keep his till June; and he ranks the Spitzenburgh as next in value. Has not planted many Russets. He complained of want of a good market. In the garden adjoining the house, we observed some pear trees, chiefly Lawrence, Duchess, and Louise Bonne de Jersey, all doing well. From his remarks we gathered that the English cherries do not set their fruit well here, and plums do not succeed, because of the curculio.

In front of the dwelling on Mr. Moore's farm, near by, we saw a fine old tree of the Summer Bonchretien pear, with a good crop on it, but the fruit was much spotted.

The next place visited was that of Mr. Abner Chase, on the 4th concession, near the village of Sparta. He has a fine orchard of apple trees, and gives the preference to the Greening as a market fruit, although the Spitzenburgh and l'aldwin both succeed fairly with him. He gives the price for apples as usually about 90 cts. per barrel, delivered at Port Stanley. His peach orchard numbers from 400 to 500 trees, from which he has had fair crops for three years past, and estimates that of the present year, at from 200 to 300 bushels. Last year he sold 200 bushels, and the usual price is \$1 per bushel on the spot. English black cherries bear well on this farm every year, and attain a good size; but we could not ascertain the name of the variety here referred to. The black aphid, which infests the tips of the young shoots and stunts their growth, has established itself here also. Mr Chase is 88 years of age, but quite brisk and active, with the use of all his faculties; his family came from Rhode Island.

Mr. Isaac Mills, residing in the same township, was next called on. He raises strawberries for market, as well as other fruits, chiefly the Wilson, and this season he sold \$115 worth, at ten cents per quart, from less than an acre of ground. Some six or eight years since Mr. Mills planted about 1,000 peach trees, and has now some 600 living; they are all seedlings from a medium sized yellow-flesh peach and very similar in character, and of fair quality. He thinks his trees do not bear a full crop oftener than once in three years, and the price realized for the fruit varies from \$1 to \$1 50 per bushel. A few young trees are planted now and then to take the places of any that may die out. In his apple orchard there is 300 trees, principally Greenings, Spitzenburghs and Roxborough Russets, which he finds to be preferable to any other varieties. His trees were raised from seeds planted by himself 51 years ago, and afterward top-grafted. Cherries, quinces, and pears are said to do well here; of the latter, we saw the following varieties bearing good crops: White Doyenne, Bartlett, Louise Bonne de Jersey, and Duchesse d'Angouleme. The pear tree slug, *Selandria cerasi*, which devours the leaves in such an unsightly manner, we observed at work here. Mr. Mills had a few grape vines, chiefly Concord and Clinton; they were growing well, but were too young to fruit.

In the garden of Mr. Elihu Marsh, on the farm adjoining, we saw the Orange Quince, fruiting finely, as well as several varieties of grapes, some of which were suffering much from *Thrip*; we noticed the Clinton, Delaware, and Hartford. This gentleman purchased what he supposed to be, quite a number of different varieties, from a tree pedlar, some of them being furnished with very high sounding original names, quite new to your committee, but, on maturity, most of them had proved to be Clinton. It is very unfortunate for fruit growing interests that farmers will continue to patronize such unscrupulous characters, as most of these wandering pedlars are. It would cost them no more, indeed, often less, to send to some reliable nurseryman for their stock.

As evening was now approaching, we drove next to Port Stanley, where we put up for the night, at the Fraser House, a new hotel, beautifully situated, high up on the banks bordering the lake. We learnt here that the Rev. Mr. Latimer had been very successful in his efforts at plum raising, and saw some magnificent samples of his fruit. His success was mainly owing to his attending to the curculio, jarring his trees regularly, and catching and destroying this insect pest.

The first day having been spent in inspecting the district east of Port Stanley, the next morning we started early in the opposite direction, along the lake shore road, in the Township of Southwold, towards Port Burwell. We first called on Mr. P. Breen, where we found plenty of Clinton vines doing well. In his orchard we saw the following varieties of apples, all bearing good crops: Baldwin, Northern Spy, R. I. Greening, Rambo and Swaar. There were several late Crawford peach trees here, making vigorous growth, but not bearing much fruit. He has two varieties of cherries, which do well with him, one bearing a red and the

other a dark red fruit. Mr. B. had a few pear trees, but they had not been well cared for, and did not appear thrifty. On an adjoining farm we observed a handsome, well-grown tree of the Louise Bonne de Jersey variety, bearing heavily.

On the farm of Mr. Thomas Brady we found the Duchesse d'Angouleme, fruiting well; one of the trees was slightly affected with leaf blight. He had plenty of Concord and Clinton grapes, also seedling peaches, all bearing fruit; there were also a few plum trees here but they do not hold their fruit, owing to the attacks of the curculio; when these are kept under by jarring, but little difficulty will be found in raising good crops. All along the lake shore road orchards were very common, and fruit plentiful.

We next visited the farm of Mr. George Miller, where we saw a very fine collection of fruits growing very thriftily. His land extends to the lake, and is well sheltered from cold winds by the surrounding woods. The Lawton blackberry flourished here in perfection, and was very heavily laden with fruit, with no sign of the wood winter-killing; and he had also several hundred grape vines, including Hartford, Concord, Delaware, Clinton, and Catawba, all bearing fruit, the size of which was large, furnishing evidence of the suitability of this locality for grape raising. His late Crawford and George the Fourth peach trees were very thrifty, and bearing good crops; and the same may be said of a large number of seedling peaches on his grounds. He realizes from 50 cents to \$1 per bushel for his seedling peaches, but the better varieties sometimes bring \$2. The nearest markets are Fingal and Port Stanley, both $4\frac{1}{2}$ miles distant. The grapes when marketed bring six cents to nine cents per pound. His Catawba vines are planted chiefly along the bank on the lake shore, where they are protected by a heavy belt of woodland. Here they ripen well, no frosts troubling them till early in November.

Our next call was at the place of Mr. John Ferguson, one of the few members of our Association in this district. He has five acres which he is planting out with fruit stock, chiefly grapes and strawberries, with the view of furnishing the neighbouring farmers with plants, as well as marketing the fruit. He had a large number of young grape vines, some few of which were fruiting; their growth was quite luxuriant; the strawberries also promised well.

Passing along we entered the Township of Dunwich, and visited the orchards of the late George McBeth Esq. On the way we passed through a charming avenue several miles in length, which had been left by the late Col. Talbot when the road was first opened. The trees were chiefly beech, mixed with maple and basswood, and exhibited the most luxuriant growth and lovely forms we have ever seen. On arrival at Mr. McBeth's place, we found a magnificent apple orchard, covering some 33 acres in all, and embracing many varieties. The St. Lawrence had been planted largely, and was fruiting well, but the fruit in most instances was badly spotted, and sometimes cracked. We were told that it is not usually so spotted, this season being an exceptional one in that respect. Specimens furnished later in the season to one of your committee from this orchard were very fine, and of excellent flavour. His Poughkeepsie Russets were very good, and the same may be said of the Red Astrachan, (now nearly over) Bourassa, and Tallman's Sweet. The Baldwin succeeds admirably, is perfectly free from spots, large, and handsome. The few peaches we saw here were rather indifferent, but cherries were growing luxuriantly, and we were informed that two varieties of English cherries, a white one and a red one, bear abundantly every season, but the birds are so numerous that they take them all. There are some trees of the Summer Bonchretien pear on an adjoining farm, which have grown to a very large size, and bear well.

The land on each side of Talbot street west, between Burwell's Corner and Fingal, is much less undulating than the districts over which we had previously passed, and the heavy clay soil appeared cold and damp. Here and there we found some of the more intelligent farmers alive to the importance of draining, and no doubt much will yet be done in this way towards improvement in that section.

At Fingal, we met with Mr. Glasgow, of the firm of McPherson, Glasgow & Co., who grows fruit largely. The Snow Apple Spy, Baldwin, and Greening, were all spoken favourably of. Besides the apple orchards, Mr. Glasgow has a few pear trees, which bear very well, but occasionally suffer from blight. Plums grow well here, but there is the same complaint as elsewhere about the fruit dropping when partly grown, from the attacks of curculio. Peaches usually yield fair crops; they bore well last year and this year, but do not succeed every season. Mr. G. informed us that for many years the large white English gooseberries,

(probably Whitesmith) yielded well with him, and were free from mildew; but about w years since the gooseberry sawflies became plentiful, and since then the foliage has been so destroyed that where the bushes have not been killed outright the fruit has been worthless.

On the road between Fingal and St. Thomas, we passed many orchards, chiefly old ones; but from the appearance of the trees and character of the soil, we deem this section less favourable for fruit culture than most of the other portions we have visited.

In St. Thomas we observed an unusual number of fruit trees in the gardens surrounding the dwellings, among others some peach trees with full crops. We called upon Mr. George T. Claris, who has a very fine and well kept garden, where we saw some good specimens of apples, pears, plums, and grapes; and also inspected the grounds of Mr. Ellis, where we saw some Tokalon grapes, and good pears and apples. In the garden of our good friend Mr. Laing, we found some well grown grapes, principally Delaware and Concord.

The time at our disposal for this visit to the Lake Shore district of Elgin was not at all sufficient to admit of a thorough inspection of its whole length; still we believe that in our route we have gone over some of the best districts which that county embraces. We examined a stretch of nearly 20 miles of the frontier, and are fully satisfied that much of it is admirably adapted both by soil and climate for fruit culture. We feel sure that if the farmers would pay a little more attention to cultivating and manuring their orchards, that it would be to their advantage, rewarding their endeavours by better crops of finer fruit. We regretted to see the cultivation of pears so much neglected. Plums also could be produced in abundance, where they are now scarcely known, by giving a little attention to the curculio. We would also urge upon the farmers of these favoured regions the advisability of their paying a little more attention to small fruits, which at present, with the exception of a few strawberries, are almost entirely ignored. Our finer raspberries would probably succeed well in many of the locations we have referred to, and these, with currants, gooseberries, and blackberries, all of which could be raised with but little trouble—would add very much to home comforts and attractions—besides being conducive to health.

On our return to London, we visited the extensive fruit farm of Mr. W. Saunders, covering about 40 acres; and although planted but two or three years since, we found the young trees making good growth. We were pleased to hear of another large fruit orchard being planted in this district, that of Dr. W. Woodruff, situated about four miles from London. Already about 600 trees have been planted in it, mainly pears, plums, and cherries, most of which are doing well. Should these enterprising efforts prove successful, London will shortly become an important fruit centre.

D. W. BEADLE,
WM. SAUNDERS,
A. B. BENNETT.

REPORT ON THE TREE, PLANTS AND VINE DISTRIBUTED BY THE ASSOCIATION TO ITS MEMBERS.

BRANT.—Ten replies have been received from this county. The pear tree in every instance is living, and the raspberry and blackberry in all but one. Three have lost their vine of the Eumelan grape, in two instances it suffered from mildew, in one it was winter-killed, but with the remainder it has done well. Some gave it winter protection and others did not.

BRUCE.—But one reply has been sent in. The pear tree is living, but not the berry plants. The Eumelan was covered in winter but perished.

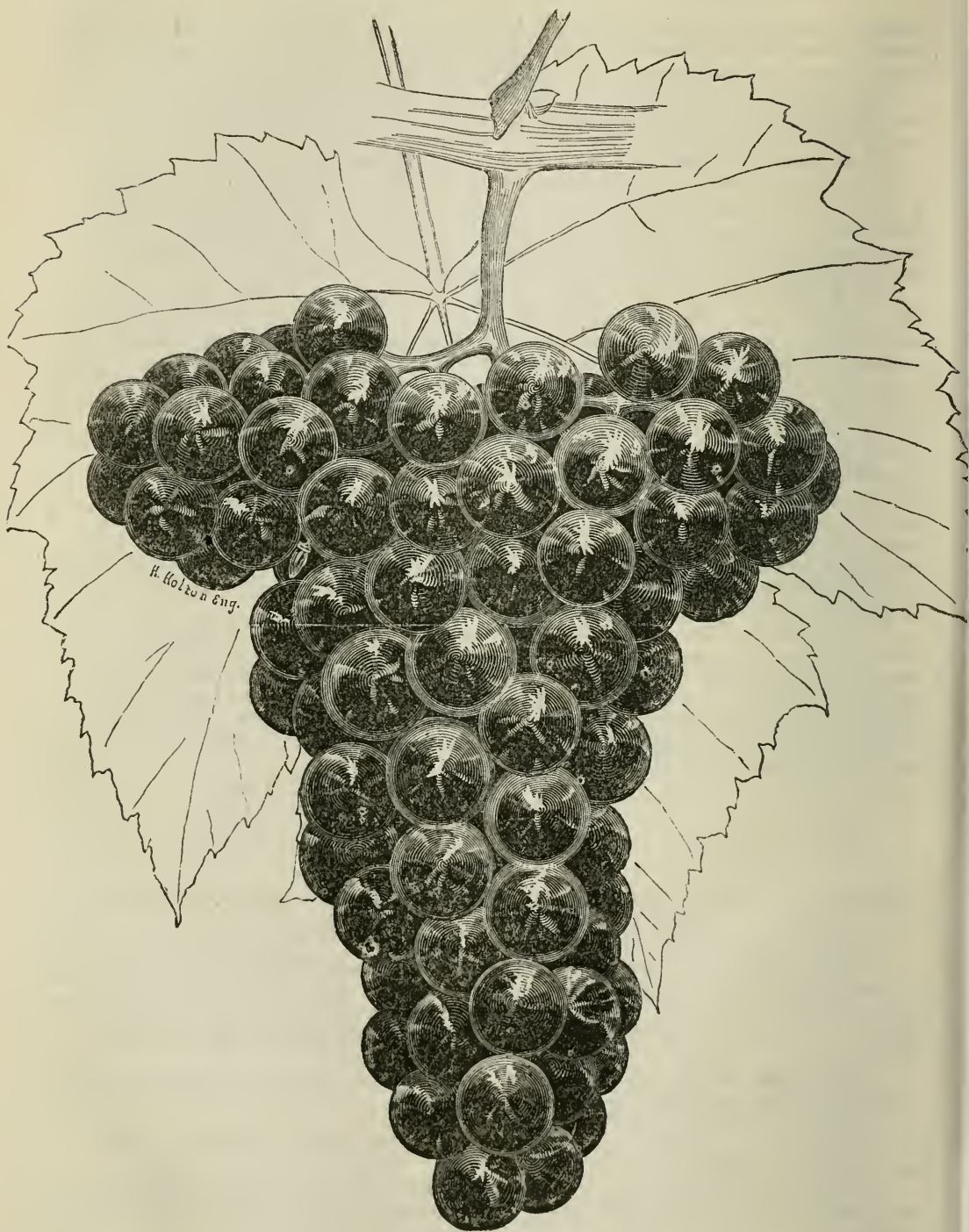
DURHAM.—One reply—All living.

ELGIN.—One reply. The pear and blackberry are living, but not the raspberry. Nothing concerning the Eumelan.

FRONTENAC.—Only one reply. The pear tree, and blackberry, and raspberry are doing well, the Eumelan has made a good growth, did not mildew, was not injured by the winter, and was not protected.

GLENGARRY.—One reply. Pear and Raspberry living, blackberry dead.

GREY.—Four replies. The pear tree is living in all, one blackberry and one raspberry dead, the Eumelan made a good growth, did not mildew, was protected in winter.



THE EUMELAN GRAPE.

HALDIMAND.—Only one reply. Tree and plants living, Eumelan made a small growth, did not mildew, had some winter protection.

HALTON.—Five replies. Pear tree living, two blackberry plants dead, and one raspberry. Eumelan made good growth, ripened fruit September 15th, no mildew, were protected in winter, one had lost it.

GRANVILLE.—Two replies. Pear tree living, blackberry both dead, one raspberry living. Eumelan made good growth, no mildew, not injured in winter, one was protected. One Eumelan ripened its fruit 4th September.

HURON.—Nine replies. The pear tree living in all, three had lost the blackberry and two the raspberry. One had lost the Eumelan. With others it had grown from two to twelve feet, had not mildewed nor suffered from winter. One only had protected it in winter.

KENT.—Six replies. In all cases the pear tree was living; in two instances the blackberry had died, and in two the raspberry. The Eumelan had grown from two to five feet, and had some slight mildew, one had winter protection, none had suffered from the winter.

LEEDS.—One reply. Pear tree and plants all alive.

LINCOLN.—Fourteen replies. In only one instance had the pear tree failed to grow; two had lost their blackberry, and three their raspberry plant. The Eumelan had made full growth, no mildew, one had been injured by the winter, and but one had given any protection in winter.

LENNOX and ADDINGTON.—One reply. Pear tree living, berry plants dead. Eumelan killed to the ground, yet grew five feet this summer, had slight winter protection.

MIDDLESEX.—Twenty replies. In all the pear is reported living; two report the blackberry dead, and three had lost the raspberry. The Eumelan had made various growths, from one to twenty-five feet, and one had borne fruit; none had shown any mildew, nor been injured by the winter, and ten had covered the vine with some slight winter protection.

NORTHUMBERLAND.—But one reply. The pear tree and plants were living. The Eumelan had made good growth, no mildew, was protected in winter.

NORFOLK.—Two replies. Pear tree living, one had lost the blackberry, and both the raspberry. They had become members since the Eumelan had been distributed.

OXFORD.—Two replies. Pear tree alive, one blackberry, and one raspberry dead.

ONTARIO.—Five replies from members who had not received the Eumelan. The pear tree and berry plants were all living.

PERTH.—Two replies. The pear tree and berry plants were living. One had lost the Eumelan, with the other it had shown no signs of mildew, had passed the winter safely with a slight covering.

PEEL.—Four replies. Pear tree living, two lost the blackberry, and one the raspberry. One Eumelan died, the rest grew well, no mildew, were slightly protected in winter.

PETERBORO'.—One reply. Pear tree and plants all living.

SIMCOE.—Three replies. Pear tree living, one blackberry, and two raspberries dead. The Eumelan made good growth, no mildew, no injury in winter, was merely laid on the ground.

VICTORIA.—Three replies. The pear and blackberry plants living, one raspberry dead.

WATERLOO.—Sixteen replies. The pear tree living in all, four blackberry and the raspberry plants dead. The Eumelan had grown from two to eight feet, one had borne four bunches of fruit, one mildew, no injury from winter, one had no winter protection, the remainder were protected, some with straw, and some with evergreen branches. One Eumelan reported dead.

WELLAND.—Nine replies. Pear tree living, two blackberry and three raspberry dead. Eumelan had grown from two to four feet, no mildew, no injury from winter, and no winter protection.

WELTHORTH.—Seventeen replies. The pear tree living, also the blackberry, one raspberry dead. The Eumelan had grown from "not much" to ten feet, no mildew, one reported winter-killed, and one other as dead, the others showed no injury from the winter nor any mildew, four were not covered, most of the others reported to have had slight winter protection.

WELLINGTON. — Three replies. The pear, raspberry and blackberry all living.

One Eumelan only reported, this grew eight feet, showed no mildew, was protected in winter.

HASTINGS.—Seven replies. In all the pear tree and plants were reported living, except one raspberry.

LAMBTON.—Twenty-three replies. The pear tree living, three blackberry and six raspberry plants reported dead. Eumelan growth varying from two to five feet, one bore two bunches of grapes, none suffered from mildew, none from the winter, four had no protection, the others a slight covering.

YORK.—Nine replies. The pear tree living, three raspberry plants and one blackberry dead. One Eumelan reported, had no winter protection, made good growth, was not injured by the winter, and was free from mildew.

FRUITS AND FRUIT-CULTURE.

BY W. SAUNDERS, LONDON, ONTARIO.

To the Fruit Growers' Association of Ontario :

GENTLEMEN,—It is very pleasing to note the rapidly growing interest manifested in fruit-culture, throughout the Province. But a few years since, it was generally held, that the climate of Canada, was quite unsuited to the growth and perfection of many of the finer fruits, but of late, since experiment has shown to some extent the falsity of this view, fruit-culture has been greatly stimulated; and now orchards, vineries, and small fruit patches, dot the surface of the country, at least all over this western section; and people are beginning to realize that even here, it is quite within the reach of all; to sit in summer under the shade of one's own vine, and while enjoying the cool shelter which it affords, admire the rich clusters pending from it; and before the golden autumn has gone, to gather these refreshing gifts of nature and enjoy their sweetness. We need not, however, limit our remarks to the juicy fruit of the vine; there is the rich and melting pear, the fragrant sweetness of the plum, the refreshing combination of acid, and sweet in the strawberry and raspberry, so agreeable in the heat of summer; and last, but by no means least, the numerous varieties of beautiful apples, whose richness, flavour, and long keeping qualities, enable us to prolong the pleasures of the fruit season till spring.

It would, perhaps, be interesting to look back some few centuries, and see how our forefathers were supplied with those good things; may be it will provoke in our hearts a spirit of gratitude to the Great Giver of all good, to note how much more highly favoured we are than they. With this purpose in view, it will, we think be best to take up separately some of the more important fruits, and briefly trace the history of their progress, up to their present state of perfection; and in doing so we shall draw freely from material contained in the standard works on fruits, particularly from Warder's "American Pomology," and that elaborate and exhaustive volume, the last edition of Downing's "Fruits and Fruit Trees of America." We make this acknowledgement here to avoid repetition in the text.

THE APPLE.

We cannot do better than begin with the apple, a fruit which our climate produces in the greatest perfection, and which promises before long to hold an important place among our exports. Already our Canadian apples have such an excellent reputation in the markets of Europe, that the demand far exceeds the supply, and would probably continue to do so, were our exports increased two-fold.

The apple is mentioned several times in the Holy Scriptures; in the "Song of Solomon" three references are made to it, and there is one also in "Proverbs," "a word fitly spoken is like apples of gold, in pictures of silver." It is much doubted by commentators, whether this refers to the apple as we have it, and it is more commonly held, that the word which our translators have thus rendered, refers to the citron, orange, or some other subtropical fruit.

The apple tree is a native of Europe, and the fruit was well known to the Romans. Pliny

refers to it in his writings, and talks of the improvement of the wild sorts by grafting. He speaks of 29 kinds, as then cultivated in Italy—this was about the beginning of the Christian era—subsequent progress, however, in the improvement of this fruit, led to the discarding of the varieties mentioned by Pliny, better ones being substituted, and nothing is known now of any of the sorts then so highly extolled.

The apple is probably a native of England, as well as of other parts of the continent of Europe; for history tells us, that in the year 973, King Edgar, when fatigued with the labours of the chase, rested under a wild apple tree. In the 16th year of Henry the VIII, Pippins were introduced into England, by Lord Masehal, who planted them at Plumstead, in Sussex. Soon after this the celebrated English Golden Pippin originated at Perham Park, in Sussex, and its cultivation rapidly spread. The Ribston Pippin had its origin also about that time, and was a native of Ribston Park, Yorkshire, the original tree having been raised from the seed of a Pippin brought from France.

At a somewhat later period, 1597, John Gerard published his "Lessons of Plants," in an extensive folio. In reference to apples, he says:—"The fruit of apples do differ in greatness, forme, colour, and taste, some covered with red skin, others yellow or greene; varying infinitely according to soil, and climate. Some very greate, some very little and many of middle sort; some are sweet of taste, or something soure, most be of middle taste between sweet and soure; the which to distinguish I think it impos-ible, notwithstanding I hear of one who intendeth to write a peculiar volume of apples, and the use of them." This author was somewhat of an enthusiast in his department, and evidently appreciated the value of fruits, and thus urges on their culture. "Gentlemen that have land and living, put forward, graft, set plant, and nourish up trees in every corner of your grounds; the labour is small, the cost is nothing, the commoditie is great, yourselves shall have plentie, the poor shall have somewhat in time of want to relieve their necessities, and God shall reward your good mind and diligence." He also gives us one peculiar use of the apple, which we in modern times appear to have overlooked. "There is," he says, "made an ointment, with the pulp of the apples, and swine's grease, and rose water, which is used to beautify the face, and to take away the roughness of the skin; it is called in shops *pomatum*, of the apples whereof it is made."

In America, most of our finest apples appear to have originated by chance. They have been accidental seedlings, in orchards, gardens, or sometimes even in waste places. In most of such cases, there has, no doubt, been a happy blending of fortunate circumstances, the seed has probably been from a good sort, fertilized by insects, or some other of nature's agents, with pollen from some other good variety, and in the resulting seedling, there has been an excellent combination of the best qualities of both; with the addition of other valuable properties, such as new flavour, and improved keeping qualities. The Esopus Spitzenburgh probably the highest and richest flavoured of all our apples, and one which takes the lead in European estimation originated at Esopus, a famous apple district originally settled by the low Dutch, on the Hudson River New York. The Rhode Island Greening, as its name suggests, was probably first produced in Rhode Island; although its exact origin is unknown. This excellent variety, is perhaps, more widely disseminated and extensively grown, than any other apple we have, owing mainly, no doubt, to the healthiness and hardiness of the tree, and to the fact of its bearing large and regular crops.

The Baldwin is a native of Massachusetts, while the Northern Spy, originated on the farm of Hermann Chapin, of East Bloomfield, near Rochester, N. Y. Many more might be enumerated in this way, but these examples will suffice. Every now and then, a valuable new seedling makes its appearance in our own country, and from thence its cultivation spreads.

THE PEAR.

The pear is also a very ancient fruit. It was common in Egypt, and Greece, so long ago as the earliest times of the Romans, and from Greece, it was transplanted into Italy. Virgil mentions some pears, which he received from Cato. Pliny, in his 15th book, describes the varieties in cultivation in his time as very numerous. "Of all pears," he says, "the Costumine is the most delicate and agreeable." The Falernian Pear, was esteemed for its juice, and the Tibernian, because it was preferred by the Emperor Tiberias. There were "proud pears," so called because they ripened early, and would not keep, and "winter pears," pears for baking, as at the present day. None of these old Roman varieties have survived,

and we might have believed that some of them approached the buttery lusciousness of our modern pears, did not Pliny pithily add, most unfortunately for their reputation; "all pears whatsoever are but a heavy meat, unless they are well boiled or baked."

In portions of Europe; Western Asia, and China, the pear grows wild, in company with the apple, in hedges and waste places. In its wild state, it is one of the most astringent of all fruits, and when eaten seizes the throat, with a most unmerciful grip. The pear tree is not a native of America, but has been brought here by foreign agency. The French Huguenots in their native homes paid much attention to the cultivation and improvement of the pear, and when exiled from their country, they carried with them the seeds of some of their choicest varieties, and planted them around their new homes. When some of these persecuted people were led to cross the ocean, to seek in the new world that religious liberty, which was denied to them in the old; they brought their favourite pear seeds here with them, as is shown by the number of aged trees, in the immediate neighbourhood of their first settlements; particularly on Long Island, and at New Rochelle, also in Michigan, and Illinois, and from thence they were disseminated over other portions of the country.

The pear tree is celebrated for its longevity. There are several in Europe known to be near 400 years old. The Stuveysant pear tree which was destroyed in New York City in 1867, was originally planted by the old Governor of the Dutch colony there, more than 200 years ago, on what was then his farm, but which is now a thickly built portion of the city.

Downing states, that one of the most remarkable pear trees for growth and productiveness in this country, is to be found about ten miles north of Vincennes, in Illinois. It is not believed to be more than 40 years old, but the girth of its trunk one foot above the ground is twelve feet, and at nine feet from the ground, it is six and a half feet; and its branches extend over an area ninety-four feet in diameter. In 1834 it yielded one hundred and eighty-four bushels of pears, and in 1840, it yielded one hundred and forty bushels. The fruit is tolerably large and of fair flavour.

During the 17th and 18th centuries, many excellent varieties of pears were brought into notice, but the highest points of pear excellence, were not reached until within the last fifty or sixty years, during which period the better sorts have been subjected to a process of continual improvement, by crossing and selection, until now there remains but little to be desired, in relation to the perfection of this fruit. It is undeniably the favourite production of modern times and modern cultivators.

There is one peculiarity in reference to this fruit which should always be borne in mind; that is, that it should never be allowed to ripen fully on the tree but gathered a week or ten days before maturity, and ripened in the house, as in this way it attains a much higher and finer flavour, as well as a more buttery texture, and rich juiciness. Want of attention to this point, has led some pear growers to speak disparagingly of varieties which are highly deserving.

Many excellent pears have originated in this country, chiefly from chance seedlings, while many others of equal importance have been imported from Europe. The Bartlett, probably now the most popular, and best known of all pears, is an English variety, known at home as Williams' Bonchretien. It originated about 1770 in Berkshire, and was afterwards propagated by a London grower, named Williams. When first introduced into this country, its name was lost and having been chiefly cultivated and disseminated by Enoch Bartlett, of Dorchester, near Boston, Mass., it became so universally known as the Bartlett pear, that it is impossible to alter it now. The climate of this country suits it admirably, the tree grows well, and the fruit has a finer flavour here, than it has in England.

The Duchess d'Angoulême, is a magnificent dessert pear, very large, sometimes weighing a pound or more, and of fine quality. This is also a European sort, and is said to be a natural seedling found in a forest hedge near Angers.

The Seckel, the standard of excellence among pears, and without doubt the most exquisitely flavoured variety known, is of American birth; and had its origin on the farm of a Mr. Seckel, about four miles from Philadelphia. The original tree is still living, and continues to bear fair crops of fruit.

Clapp's Favourite, a very fine variety recently introduced, is also of American growth, having been raised from seed by the late Thaddeus Clapp, of Dorchester, Mass. Although not yet very widely disseminated, it has been awarded on several occasions the highest

premiums for excellence of quality. It is said to ripen late in August, or early in September, or a week or ten days before the Bartlett. These are given merely as samples, for this portion of the subject is almost inexhaustible, since more than one thousand varieties of pears have been fruited in this country, and many of them have proved to be first class fruits.

The method of dwarfing the pear, by grafting it on the roots of the quince, has greatly stimulated pear culture; for by this method, instead of waiting from five to fifteen years for fruit, the cultivator usually reaps some reward from his labours in the second or third season. Besides, the small bush-like form of the tree adapts it to the small garden of the amateur, where the tall-growing standard would be inadmissible. It is said by some that the trees thus dwarfed are short lived, frequently dying out after fifteen or twenty years, but experience seems to indicate that if properly cared for and not allowed to overbear, they will endure for a very much longer period. In this country there are many dwarf pear trees upwards of thirty years old, and in Europe there are some as old as fifty years.

THE PLUM.

The finer varieties of plums are nearly all of recent origin, most of the best American sorts having been produced within the last fifty years, but some few of the best European sorts date back much further than that. The Green Gage for example, a well-known fruit of very superior flavour, was brought into notice some time during the last century. An English family of the name of Gage obtained a number of fruit trees among the monks of Chartreuse, near Paris, France, and among them was a tree of this plum, which having lost its name, was called by the gardener Green Gage.

Among the finer American sorts the following are deserving of special attention. The Washington, which originated about fifty years since on Delaney's farm, on the east side of the Bowery, in New York city; the Lombard, a seedling raised by Judge Platt, of Whitesborough, near New York, which is probably the most prolific and profitable variety grown; Smith's Orleans, raised by a Mr. Smith, of Long Island; the Imperial Gage, a seedling of the Green Gage grown at Prince's nursery, Flushing, New York; the Jefferson, raised by the late Judge Buel, of New York, and the McLaughlin, which originated with Mr. James McLaughlin, of Bangor, Maine.

Nearly all the different sorts of cultivated plums are believed by the best botanists to have sprung originally from the sloe. In this country we have several species of wild plums, which would, no doubt, if properly experimented with, be capable of great improvement; but thus far little or nothing has been done in that direction. The perfect hardiness and adaptability of the European species to the varied climates to be found throughout the United States and Canada, leaves little to be desired on this head.

THE CHERRY.

The cherry is a handsome tree, of luxuriant growth, and comes early into bearing. Its fruit is exceedingly pleasant and refreshing, and coming in as it does in the hottest parts of the summer, before any of the other larger fruits mature, it is deservedly held in high esteem.

The cultivated cherry comes originally from Asia; a Roman general named Lucullus, after a victorious expedition into Pontus, has the reputation of having brought it to Italy from Cerasus, a town in the conquered province, in the year 69 B. C. One hundred years after this, according to Pliny, the Romans had eight varieties in cultivation, and they were soon afterwards carried to all parts of Europe. The seeds of this species of cherry were brought to America very early after its settlement, both from England and Holland. There are two classes of cherries grown, one comprising the "*Hearts*" and "*Bigarreau's*," characterized by the firm flesh of the fruit, the large and somewhat drooping nature of the foliage, and the upright and vigorous growth of the trees. The other includes the "*Dukes*" and "*Morello's*," which are weaker growing, with slender sometimes drooping branches, smaller foliage, and fruit more acid, tender and juicy. To the latter class belongs the common cherry cultivated here, known also under the names of the Kentish Cherry and Early Richmond, a variety unsurpassed in hardiness and fruitfulness, and notwithstanding the comparatively low price at which the fruit is usually sold, is probably the most profitable sort grown. In some parts of Germany it is the custom to plant avenues of cherry trees along the roadside, which,

while affording ornament and shade, furnish the poor and the traveller with pleasant refreshment during one of the hottest portions of the year. This is particularly the case in the northern parts of Germany, where some of these avenues are many miles in length. Mr. Loudon, in his "Arboretum," says: These avenues are planted by desire of the respective governments, and that all persons are allowed to partake of the cherries, on condition of not injuring the trees; but the main crop, when ripe, is gathered by the respective proprietors of the land. When it is desired to preserve the fruit of any particular tree, a wisp of straw is tied in a conspicuous part to one of the branches. The highest respect is paid by the peasants and travellers to these appropriating marks, and the fruit remains untouched, and there is something as highly gratifying in this as in the humane feeling displayed by the Princes of the different countries in causing the trees to be planted, showing that kind treatment produce a corresponding return.

Downing enumerates one hundred and eighty-seven varieties of cherries as cultivated in this country, many of which are of American origin. Professor J. P. Kirtland, of Cleveland, Ohio, has been the chief experimenter in this direction, and by carefully crossing the different kinds, has raised from the seed thus influenced many excellent sorts. Among those chiefly cultivated, in addition to the common cherry, the following hold an important place: Early Purple Guigne, Black Tartarian, Elton, Black Heart, Governor Wood and May Duke.

THE PEACH.

Although the culture of this comparatively tender fruit does not promise much success in the northern portions of our Province, yet on some of our lake shores it may be grown with tolerable certainty. Along the lake shore district, in the county of Elgin, and stretching up as far as Amherstburgh, and again along Lake Huron near Sarnia, this fruit has been successfully grown. In the latter locality several large peach orchards have lately been planted. At present we know but little of the fruit capacities of these extensive districts, but from what is known, we are led to believe that they will eventually furnish an abundant supply of peaches for our people.

The peach tree is a native of Persia and China, and was brought from the former country to Italy by the Romans, in the reign of the Emperor Claudius. It was cultivated considerably in Britain, as early as 1550, and was introduced into this country by the early settlers, about 1680. The tree is more tender and short-lived than most of the other fruits grown in temperate climates, but it is very easily propagated, grows rapidly, and bears fruit while quite young. It is never raised in England, and not generally in France, excepting against walls. Even at Montreuil, near Paris, a village whose population is mainly employed in cultivating the peach for market, it is grown entirely upon white-washed walls. China and America are the only temperate countries where the peach and apple both attain their highest perfection in the open orchard. The peaches of Pekin are celebrated as being the finest in the world, and of double the usual size. It is said that the peach tree holds very much the same place in the ancient Chinese writings, that the tree of knowledge of good and evil does in the sacred scriptures. The traditions of a peach tree, the fruit of which, when eaten, conferred immortality, and which bore only once in a thousand years; and of another peach tree of knowledge, which existed in the most remote period, guarded by a hundred demons, the fruit of which produced death, are distinctly preserved in some of their early writings.

There is probably, at the present time, no country in the world where the peach is grown in such abundance as in the United States. In all the middle, southern, and some of the western states, they grow and produce the heaviest crops, in every garden and orchard. Thousands of acres are devoted to this crop for the supply of the markets of the large cities, some growers having orchards varying from 10,000 to 100,000 trees. It would be difficult, perhaps, for the public to consume, in the short time that the fruit will keep, the enormous quantities thus thrown suddenly upon the market, were it not for the immense amounts used by the fruit canning establishments in the various cities of the Union. During a recent visit to Baltimore, Maryland, we enjoyed the privilege of going through one of the largest of these, then in full working order, it being the height of the peach season. The firm employed about 200 hands, and the daily consumption of peaches was fifteen hundred bushels. A large proportion of the employees were engaged in peeling the fruit, its soft character preventing the use of machinery for this purpose, and it was amusing to watch the dexterity shown by old

hands in this department. Others were engaged in filling the cans, and more in securing them, every can being thoroughly tested before shipment for market. The air being entirely excluded, the fruit is preserved for an unlimited time without change, which allows of its being forwarded to all parts of the civilized world.

Farther south, a large business is done in drying peaches, which are merely dipped in boiling water for a few minutes then halved with the skins on; and after the stones are taken out, dried in the sun, exposed on boards or frames.

In former years, the Niagara district was famed for its peaches, indeed, as far west as Hamilton, excellent crops were grown, but of late the yield has been so uncertain as to divert the attention of most fruit growers to other and more profitable channels of enterprise. The varieties most commonly known in the markets, are the Early and Late Crawfords, both American seedlings, which originated with Mr. Wm. Crawford, of Middleton, New Jersey. Hale's Early is a very promising peach for Canadian cultivation, as the tree is more hardy than most varieties, and the fruit matures early.

THE NECTARINE.

The nectarine is merely an accidental variety of the peach, with a smooth skin. The fruit is usually smaller, but it is one of the most delicate and exquisite of all productions for the dessert; but it is particularly liable to destruction from the curculio, and hence is very little cultivated. There are many different sorts of nectarines, among which the Victoria, a seedling of Thomas Rivers, Esq., of England, holds the highest rank.

THE APRICOT.

This is also a very delicious dessert fruit, ripening after cherries, and before plums and peaches. It also is very subject to curculio attacks, and perhaps, partly on this account, has not received from fruit growers that attention which it is deserving of. The Breda, Turkey, Moorpark, and Early Golden, are prominent among the varieties well spoken of.

THE GRAPE.

The grape next claims attention, the history of which is almost as old as that of man. Growing in its highest perfection in Syria and Persia, its luscious fruit, and the tempting beverage which its fermented juice affords, recommended it to the especial care of the earliest tillers of the soil; and vineyards were extensively planted long before orchards or collections of other fruit trees were at all common. It is early mentioned in the Scriptures, and the evil of excessive wine drinking was clearly shown in the case of Noah, whose indiscretion in this respect brought shame upon himself and a curse upon his son Ham. It is altogether probable that the native home of the vine is Asia, and that as civilization advanced westward this plant accompanied it, first to Egypt, then to Greece and Sicily, and gradually to Italy, Spain, France, and Britain, to which latter country the Romans carried it about 200 years after Christ.

All the cultivated varieties of the vine in Europe have descended from a common stock; all being derived from a species called *Vitis Vinifera*, or the wine grape of Europe. Some of the early colonists brought with them the seeds of their favourite European grapes, and planted them in this country, but the stock from this parentage has not proved itself adapted to the climates of America excepting on the Pacific shores. They have been found either too tender, or so subject to mildew, as to be more trouble than profit, hence their culture has been restricted almost entirely to glass covered buildings, where the temperature, and degree of moisture, is under control. Our own native American varieties are quite distinct from the European sorts. We have four of them in all, one of which need not be referred to as it is confined to the southern portions of the country. The three native northern vines are the fox grape, *Vitis labrusca*; the frost grape, *Vitis cordifolia*, and the Summer grape, *Vitis aestivalis*. These are usually more vigorous in their growth, with larger and less indented foliage, than the wine grape of Europe; and in their wild condition, the fruit has a foxy flavour and odour or else great acidity, with more or less hardness of pulp; but by judicious crossing and cultivation, these peculiarities are fast disappearing and already we possess some fine varieties suitable for dessert, and others more adapted for wine making. Most of these

possess superior hardiness and productiveness, with comparative earliness of ripening; in this latter respect, however, we look for still further improvement.

The quantity of land under culture of the vine in the wine districts of Europe, is immense; in France alone, there are more than five millions of acres; and in Europe, altogether more than twelve millions; with an average production of two hundred and fifty gallons of wine per acre; producing in all, a yearly average of 3,107 millions of gallons of wine. This interest has also been largely developed in California, where many millions of gallons are now yearly made.

The vine is noted for its longevity, there are many now in Europe, supposed to be from 200 to 400 years old, and some thought to be older. The Hampton court vine is the most famous in England. It was planted in 1769, and now covers over 2,200 square feet, having a stem 30 inches in circumference at three feet from the ground. It is a Black Hamburgh vine, and bears an average annual crop of about a ton of grapes. Two thousand five hundred large bunches have been gathered from it in a single season; its main cane is 120 feet long, and it entirely covers a roof seventy feet long and thirty feet wide.

Since the Black Hamburgh and its relatives can only be grown in this country under glass, and as this is too troublesome and expensive to become very general, the large majority of fruit growers must content themselves with such grapes as will ripen on the open trellis. The garden culture of the hardy grapes, is by no means difficult, the vines will grow under almost any system of training, or under no system at all. They will bear pruning and clipping to an unnatural degree, and also thrive under the equally unreasonable "let alone" system, allowing growth to proceed how and where it likes; but if a vine is to produce large and regular crops, for a succession of many years, and the fruit brought to proper perfection, some attention must be paid to its habits and wants.

PRUNING AND TRAINING.

The various systems of training and pruning recommended by different authors who have written on this subject, would occupy too much space to explain here; it is, however, necessary to remark, that since the fruit is borne chiefly on wood of the previous year's growth, enough of this should always be left to ensure a fair crop; while overbearing tends to weaken the vine and shorten its term of life. The following varieties are among the best for table use, and most of them are hardy and will ripen well in all but the northern parts of our Province: Deleware, Concord, Hartford Prolific, Creveling, Othello, Canada, Salem, Wilder, Adirondac, and Israella.

ON HYBRIDIZING.

Within the past few years, increased attention has been paid to the crossing of some of our native grapes, or their improved descendants, with the finer European sorts, with the hope of producing hardy seedlings, bearing fruit of increased size and better quality. Some of the grapes just enumerated, have been produced in that way, for example, the Othello and Canada, by Mr. Charles Arnold, of Paris, Ontario, and the Salem and Wilder, by Mr. Rogers, of Massachusetts, showing that a measure of success has attended these efforts; and it is believed that with the increased number of labourers now actively engaged in this experimental field, many more good results will shortly be obtained.

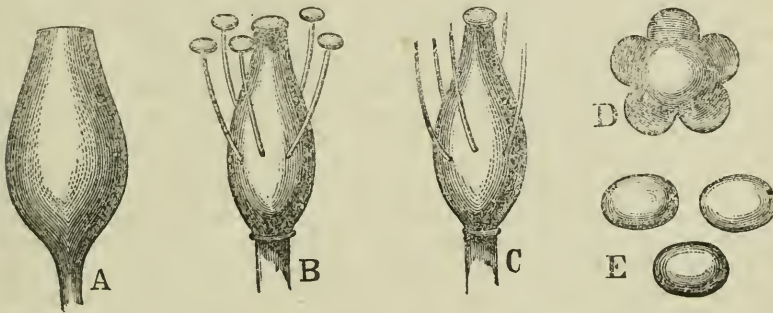
It might perhaps, be well here to enter a little into detail, in explaining this interesting method of producing new varieties. Linnæus was the first to promulgate the doctrine of the sexual characters of plants. This created quite a revolution in Botany, and no doubt attracted the attention of Lord Bacon, whose great mind seemed to have had glimpses into every dark corner of human knowledge, for he ventured to predict that there might be such a thing as crossing the breeds of plants, when he said, "the compounding or mixture of kinds in plants is not found out, which if it were, is more at command than that of living creatures, wherefore it were one of the most notable discoveries touching plants to find it out, for so you may have great variety of new fruits and flowers yet unknown." About a century later, in 1718, Bradley wrote, and he is believed to be the first author who speaks of the accomplishment of cross-breeding; which he describes as having been effected, by bringing together the branches of different trees when in blossom. This was an exceedingly crude and rough manner of

proceeding, which the gardeners of Holland and the Netherlands, soon improved upon, and they were the first to produce results of practical value, from this method of experimenting.

Within later times, the names of Mr. Knight and Mr. Rivers of England; Professor Van Mons, of Belgium, and Professor Kirtland, of Cleveland, Ohio, stand out conspicuously among those who have done most to foster and advance this valuable art in its relation to fruit culture; while many others have been actively engaged in producing new flowers and vegetables by the same process.

Since the grape offers one of the most promising fields for the labours of the hybridizer, we shall proceed to describe the process as carried on in working on that fruit. The blossoms of the grape appear in long clusters, and are not at all conspicuous. The corolla or leafy portion of the flower, which in many plants is painted in such gorgeous hues, is here of a pale green, and instead of opening at the top, and expanding as in most other flowers, this opens at the sides below, and its several petals remain united at the top, and as the stamens lengthen, the whole corolla is pushed off in one piece, resembling in shape a little cap, which falls to the ground. Then the sexual organs are exposed to view, and were it not that the anthers which crown the stamens are of a bright yellow color, and much protruded, it would be difficult without a close examination to note the flowering process at all. The unexpanded flower is much like a little bud, and the whole bunch a large cluster of such.

FIG. 1.



In the accompanying figure, A represents one of the unopened flowers on an enlarged scale. As it approaches maturity, its covering is gradually ruptured and turns a little upwards. In a short time the cap is raised higher until it sits loosely over the tops of the stamens, and then soon falls to the ground, and appears as represented at D, when the stamens released from the bond which kept them together, separate with an elastic spring, and appear as shown at B. The body of B is the female organ of the plant, and is called the pistil; the lower portion is called the ovary, and contains the ovules, or bodies destined to become seeds, the summit, or crowning top, is called the stigma. The stamens springing from and surrounding the pistil, are the male organs and number five; the knobs on their tops are called anthers, and contain the fertilizing pollen. This pollen, when mature, causes the anthers to open, and their contents consisting of almost innumerable grains, are shed gradually. The pollen grains are shown at E immensely enlarged. When the stigma is fit for fertilization, it exudes a gummy fluid, to which the pollen grains readily adhere, and the stamens with their anthers so encircle it, that no matter how the flower may be situated on the bunch, one or more of the anthers will be placed directly over it, so that it can scarcely fail to become fertilized, when pollen grains are continually falling from above and around it; and while insects are ever busy in travelling from flower to flower, and knocking the anthers about the stigma with their legs and wings. After the pollen grain has become attached to the stigma, it begins to absorb some of the moisture it finds there; and a process of growth or germination begins. The pollen sends out a minute fibre or thread, which penetrates the substance of the stigma, and then goes on lengthening downwards, until it reaches the embryo seed contained in the ovarian cavity which it enters and fertilizes.

This is what occurs in the ordinary course of nature, but when it is desired to produce an artificial cross, the male organs of the flower must be removed before the pollen is ready to be shed, and to do this we must begin early. A pair of fine pointed forceps, a magnifying

lens, a steady hand, a camel-hair pencil, and a few paper bags, with suitable string for tying, comprise all the requisites in the way of tools. Selecting then a bunch of flower buds nearly ready to open; first pull off all the immature specimens, and reduce the number of the remaining ones to two or three dozen, leaving the plumpest looking on the bunch. Then, with the points of the forceps, seize the covering eap by its side and carefully remove it; and in doing this, great care is necessary to avoid bruising the pistil, which would cause it to turn black and wither. The anthers must then be taken off, when the flower will present the appearance shown at C in the figure. As soon as the whole of the flower buds have been thus prepared, the bunch should be tied up in a thin paper bag; and left until fit for the application of the pollen, say from one to two days, depending on the weather. Paper is used on account of the closeness of its texture, for the finest muslin would allow the pollen grains which might be blowing about in the surrounding atmosphere, to pass freely through. If the buds are very mature, an application of the pollen may be made immediately, and a second one a day or two after, so as to increase the chances of success, but, in no case, must the bunch be left for a moment without being covered by the bag, for fear that in the interval some insect may pay a visit and leave behind it a deposit of pollen, carried unwittingly on its legs or wings from some other expanded grape flowers; such an accident would render all the results uncertain.

Suppose it is desired to cross the hardy but acid Clinton with the rich and sweet, but tender, Black Hamburgh, so as to endeavour to raise seedlings, having the hardy character of the Clinton, and bearing fruit of a higher quality. We should in such a case take the Clinton for the female; for it is believed by experimentalists that the seedling in plants, inherits its constitution, mainly from the mother, while in such matters as quality and flavour of fruit, it is more influenced by the other parent. The Black Hamburgh will flower as soon as or perhaps before the time the Clinton flower buds are ready, then the pollen may be collected from the expanded flowers, by holding a piece of blue paper close under the bunch and giving that part of the vine a sudden jar with the hand. A small cloud of pollen will at once be discharged, which will settle on the paper below, and by repeating the operation a few times, an appreciable quantity may be obtained, which should be carefully folded up and excluded from the light. It will now be ready for use at any time, and may be kept for weeks; indeed some French operators claim that they have succeeded in fertilizing with pollen kept over a year. When it is wished to apply the powder, remove the paper bag and touch the stigmas with a camel hair pencil dipped into it. In a day or so repeat the application so as to increase the chances of success, after which cover again with the paper bag, which should be kept on for about a fortnight, when, if successful, the fruit will be set and out of danger from extraneous pollen. Then the paper bag may be exchanged for a muslin one, as the growing fruit needs sunshine and air; but the muslin bag should remain over the cluster until it ripens; to prevent its being demolished by birds or thoughtless bipeds.

SOWING THE SEED.

When the berries are fully ripe, collect the seeds, and sow them in the fall. The winter will soften the hard shelly covering, and the young plants will appear in spring, and make a good growth of from six to eighteen inches the first year; the second and third years' growth will be much greater, and on the fourth fruit may be expected, the growth and perfection of which the experimenter will watch with great interest, till he knows whether his labours have been crowned with success or otherwise. When operating on the apple or the pear, a much longer time must elapse, generally from eight to fifteen years, before the result is known.

ON SELECTION.

Scarcely any of our better varieties of fruit will reproduce themselves from seed, and advantage is taken of this fact by fruit growers when they wish to obtain improved fruit by selection, which is the other method before referred to. Take, for example, a quantity of seeds of the Delaware grape, grown without man's interference to influence them in any way; plant them, and the fruit of the resulting seedlings will vary much, some may be white, others black or purple, or with the rosy hue of the parent, and the differences in quality will be as striking as those of colour. Many will be worthless, others of middle quality, while perhaps one in

twenty, fifty, or a hundred, will in some points be as good, sometimes better, than the parent. The seeds of such latter are sown in turn, and the next generation of plants submitted to the same weeding process, when, if successful, another step in advance is secured, by the production of a variety with additional points of excellence; and thus the work goes on, not by any means with uniform success, but associated often with failures and disappointments.

SMALL FRUITS.

So much space has already been occupied, that we shall have to hasten over the small fruits, by grouping them. All our varieties of strawberry, raspberry, and blackberry, have sprung from a few wild sorts, either European or American; these also have been improved by selection and crossing.

THE STRAWBERRY.

Of strawberries, which is the first fruit of the season, and most wholesome and delicious, we have many varieties. In old times, the gardeners were supplied with wild vines from the woods. *Tusser*, in his "500 Points of Good Husbandry," points out where the best plants of his time were to be had, and passes the cultivation of them over to feminine hands, as if they were too small a matter for a *man* to employ his time with. He says:

"Wife, into the garden and set me a plot,
With strawberry roots of the best to be got;
Such growing abroad, among thorns in the woods,
Well chosen and picked, prove excellent good."

Things have altered since this was written, and many men now devote their whole energies to strawberry culture, and receive large returns for their labour.

The most productive and profitable among strawberries is, without doubt, the Wilson's Albany, which originated with the late James Wilson, of Albany, New York. The plant is very hardy and vigorous, and exceedingly productive. The *Triomphe de Gand* is probably the next best known; it is a Belgian variety, which stands our climate well, and although it is not nearly so productive as the Wilson, the fruit is larger and sweeter, and higher flavoured. The *Agriculturist* is a very good strawberry: it was raised by Seth Boyden, of Newark, New Jersey, U. S.; it also is productive and hardy. The *Jucunda* is a foreign sort, which has been prominently brought forward by Mr. Knox, of Pittsburg, Penn. It does well in some localities, with good soil and high culture, and has a very rich colour and fine flavour; but it is not very generally cultivated. Many more good varieties might be mentioned, for their name is legion. The stimulus which the introduction of these new strawberries has given to the culture of this fruit is astonishing; many tons are now yearly brought to the larger cities and readily disposed of.

THE RASPBERRY.

Of all the raspberries in cultivation, the Brinckle's Orange stands at the head for flavour. It is an orange yellow berry, of good size, a seedling raised by Dr. W. D. Brinckle, of Philadelphia; the canes are rather tender in our climate, and require protection in winter. The Philadelphia is among the hardiest of the cultivated sorts, and is immensely productive. It is a red berry, of fair size and flavour, and will probably be for many years the variety for the million, since it flourishes with little care, and needs no winter protection. As our woods and fields become better cultivated, and the supply of wild fruit in a measure cut off, these in all probability will supply their place. There are several other varieties of red and white raspberries which deserve notice, such as the Franconia, Hornet, Clarke, Red Antwerp, Fastolf, and Arnold's Orange King.

BLACK CAPS.

The Black Cap raspberries are different in their character and mode of propagation from the red and white ones; the fruit is also firmer, with a distinct flavour, of a deep black colour, very juicy, and with a silvery bloom on the surface. The other raspberries are propagated by

suckers, of which they usually throw up an abundance from about their spreading roots ; but these do not sucker at all, but late in the autumn the tips of the canes and their branches become very drooping, and finally reach the ground, and then from the surface of the tip there springs a cluster of rootlets, which strike into the soil and soon form a well rooted plant. The Doolittle and the Mammoth Cluster are the chief varieties grown.

THE BLACKBERRY.

The blackberry is as yet but very little cultivated; the most promising varieties at present known are the Kittatinny, Sable Queen, and Wilson's Early. The Lawton is too tender for most sections of our Province.

THE SOIL AND ITS PREPARATION.

In the selection of a suitable spot for a fruit garden, the soil is a matter of importance, for if favourable conditions in this respect are not provided, the labour will be greatly increased, and disappointment more frequent. The first requisite is dryness. None of the plants or trees we cultivate for fruit will grow with their roots continually immersed in water, so if the soil is wet it must be drained. It often happens that these retentive soils when drained are the very best for the purpose, and as the labour and expense connected with draining an ordinary sized garden plot is small, a location otherwise suitable need not be rejected on this account. Many fruits thrive well on a light sandy soil, even with little care or manuring, but the growth is usually poor, both in wood and fruit, as compared with similar trees in a richer and stronger soil. A rich deep loam, partly of clay and partly of a sandy character, with an underlying stratum of gravel, or gravelly clay, is perhaps the most desirable for the purpose. The pear and the plum, especially, delight in a strong rich soil, but the apple will grow and thrive on almost any sort of soil. A suitable spot being provided, the next thing is the preparation of the ground, which should be well stirred as deeply as possible. A small piece can be trenched with the spade, to the depth of eighteen or twenty inches, but on a large scale this method is too expensive, and the plough must be relied on. If a good deep furrow, say eight inches, is turned over with an ordinary plough, and a second team follows in the same line, with a subsoil plough, the surface may be thoroughly loosened to the depth of fourteen or fifteen inches, and thus leave it in very good condition for planting.

PLANTING AND MULCHING.

Ordinary standard apple trees should be planted about thirty feet apart each way; standard pears and cherries from twenty to twenty-five feet; dwarf pears about ten feet, and plums, peaches, and apricots from sixteen to twenty feet. After planting, trees should be thoroughly mulched, that is, the surface of the ground around them covered with some material which will retain the moisture in the soil, such as manure, chip rubbish, saw-dust, chaff, or litter of any sort, or small stones. These all operate beneficially, by preventing the surface of the ground from becoming dry to any depth, which would cause the young and tender rootlets near the surface to wither; and such material as will decay slowly and enrich the soil would be a benefit in that way also.

Simple as the operation may seem to be, there are many people who do not know how to plant a tree properly; a deep hole is often dug, scarcely large enough to crowd the roots into, and these, when stuffed into this small aperture, have the soil well packed down on them above, and then they are let alone to struggle on as best they can; and where the trees fail to grow, as is very commonly the case, the nurseryman who furnished them gets all the blame. Before planting a tree, its roots should be examined, and if there are any among them injured, or partly broken, they should be cut off back to a sound part, with a sharp knife. A hole should be dug always somewhat larger than the entire circumference of the roots when laid out in a natural position; the roots should then be well spread, and fine soil worked in among the smaller fibres with the hand, so as to prevent their being crowded together. If proper care be taken in this way, the roots will occupy after planting much the same relative position as they did in the nursery rows from which the tree was taken. It should not be planted too deep; it is safe in this respect to give it about the same position in the soil as it has occupied while

growing, or perhaps a little deeper. The hole should be filled with nice surface soil, no manure or any rich compost being allowed to come in contact with the roots; if any such is used it is best placed on the surface after planting. It is not uncommon when planting trees or vines to look up the richest and strongest manure that can be got, and to put plenty of it into the holes around the roots to stimulate their growth; blood and other animal matters are often thus used to the great detriment of the future health and vigour of the plant. The young rootlets do not thrive on such over-feeding, but oftener decay, and the plant or tree is killed by kindness; plainer fare is better, rather place the roots in the poorest kind of sandy soil than immerse them in any such rich material.

STAKING.

It is a good idea to stake such trees as are tall or have a heavy top, so as to prevent them swaying too much with the wind, which would disturb their roots.

INSECT ENEMIES.

From the commencement of the growth of the tree, and for all time to come, a close watch should be kept for insect enemies; for their name is legion. Often, when a young tree has become nicely established, and made a fair growth, some wandering moth, flits around it, and deposits on the leaves or twigs a hundred or two of eggs, which in a few days become greedy caterpillars, devouring all before them, and if not noticed in time, and destroyed, will make a clean sweep of everything green, which comes in their way. Or, again, a boring beetle, alights on the base of a thrifty tree, and deposits its eggs on the bark, near the ground, where they soon hatch into small grubs, which eat their way through the outer bark, and burrow and excavate, in the living under-bark, stunting the growth, and often destroying the life of the affected tree. Then when fruit begins to come we have the curculio, which destroys our plums, apricots and cherries; and the codling moth, whose progeny burrow into the apple and pear, and arresting the natural growth of the fruit, producing premature ripeness, when it falls untimely to the ground almost worthless.

We have no intention of detailing the various remedies, which have been suggested to combat these foes. Much of interest in this way, has already been given in the reports of the Fruit Growers Association, and Entomological Society of Ontario; to which we would refer those, who desire further information on such points.

UTILITY AND BENEFITS OF FRUIT CULTURE.

The utility of a fruit garden cannot be denied. There is no exercise more healthful and invigorating, or that will give purer pleasure to the mind, than the work there to be engaged in, and the close observer, will continually find objects of interest and beauty, to excite his admiration during the whole period of growth; and what is there more necessary to the healthy action of the mind, as well as the body, than agreeable relaxation of this sort. With what interest the cultivator watches the gradual growth of the objects under his care. What can be more beautiful than the tender budding of the grape, as it unfolds its young and roseate leaves, and to watch the growth from day to day, till the sweet-smelling blossom appears? Can anything be more charming than the apple bloom, with its richly blended tints, and so pure and fragrant; or the waxy bloom on the plum, or grape as these approach maturity: and their tempting fruits hang in bunches, or clusters on the tree, or vine; and here the climax of enjoyment is reached, when the fresh fruit is brought upon the table, its beauty delighting the eye, and cultivating the taste, by the fine display of form and colour, as well as furnishing a healthy, refreshing, and delicious dessert. By a wise selection of varieties, even a small garden may be made to yield almost a daily supply, from the middle of June, till November, beginning with strawberries, and ending with the later grapes and pears. There are few, even among the most devoted slaves to business, who have not had day dreams of some distant period, when the seclusion of the office, or the hum of the busy mart, shall be exchanged for the pure free air, and quiet calm of a country home, where under a clear blue sky, and amidst the singing of birds, their last days shall glide pleasantly away. But, alas, these dreams are seldom realized, or if the goal is reached, the end is disappointment, for the mind so long and incessantly

corroded by the cares of life, is unfitted for the purer joys which converse with nature affords; and after a brief period the merchant frequently returns again to business, and dies in harness. Still there is no doubt, but that the taste for horticulture is almost universal, and has been so ever since man came fresh from the Creator's hands. In the sublime account of creation given in holy writ, we read of the Creator, in the infinitude of His power, *speaking*, into existence, the various forms of matter,—the firmament above with the orbs which adorn it,—the earth and sea, and their innumerable forms of animal and vegetable life, from the Leviathan of the deep, to the teeming hosts, which people a drop of water; and from the stately tree of the forest, to the microscopic plant, which is visible to us in an aggregated form in the green scum which forms on the stagnant pool. But God *made* man the crowning work of the creative period, in his own image and likeness, and could find him no fitter sphere in which to labour than a garden, "so the Lord God *planted* a garden eastward in Eden," (an act of divine arrangement distinct from creative power), "in which was every tree pleasant to the sight, and good for food," and man in his purity found fitting occupation for both body and mind, in dressing and keeping this divinely planted spot. If in man's purer state, when he held converse with angels, and the Deity, this employment was so congenial to his sinless nature; surely a like occupation now, must tend to purify and elevate, all that is noble and God-like in us.

REPORT FOR 1871 ON THE PLUM CURCULIO.

BY W. SAUNDERS, LONDON, ONT.

The prizes offered by the Fruit Growers' Association of Ontario, for the capture of the plum curculio, during the past season, being much less than those for 1870, fewer persons have competed for them.

Mr. Samuel Cowherd, of Newport, Ontario, who last year sent in 1046, sends this year 1320. There being no prize offered for less than 2000, the matter was brought before the Directors, who decided to award Mr. Cowherd one-half the sum which had been offered for 2000.

These 1320 curculios were taken from 35 plum trees, which were jarred for the first time, on the 30th of May, and the jarring continued till June 10th, morning and evening, with the following results:—

May 30th.	Morning	-	not jarred	-	Evening	556
" 31st.	"	-	325	-	"	110
June 1st.	"	-	97	-	"	30
" 2nd.	"	-	68	-	"	—
" 3rd.	"	-	—	-	"	15
" 5th.	"	-	56	-	"	—
" 6th.	"	-	23	-	"	—
" 7th.	"	-	—	-	"	14
" 8th.	"	-	16	-	"	—
" 9th.	"	-	8	-	"	—
" 10th.	"	-	6	-	"	—

Where the spaces are left blank it indicates that no jarring was attempted, either on account of bad weather, or from some other cause. Mr. Cowherd remarks, that the curculios made their appearance this year, earlier than usual, and in greater numbers during the first part of the season, than he ever remembers before. From one tree of Duane's Purple, he got 56 the first time of jarring, and he thinks that variety of plum the worst to save of any. Smith's Orleans and Pond's Seedling, he ranks next in their liability to attack, while the Lombard and Prince's Yellow Gage, are much less subject to curculio. There were a few young trees in Mr. Cowherd's orchard, which fruited for the first time this year, which escaped entirely, having no stung fruit on them.

Mr. George Peacock, of Mount Salem, Elgin, Ont., who sent 506 last year, sends 2200 now. He says, "last year I jarred my plum trees—10 in all—once a day only, but this year I jarred three times a day. The insects I send this year were taken from 30 trees in all, plum, cherry, and peach." The greatest number caught in one day was 328, which was on the 30th of May. On the 29th May, 75 were taken, 1st June 107,—2nd 154, and after that less were taken every day, till the last of June, when the jarring was discontinued. There were splendid crops of plums and peaches, now on the trees which promised well; but unfortunately about the middle of July, a second brood of curculios set upon them, and had stung many plums and peaches before they were discovered. After all, there was still half a crop of fruit left, but Mr. Peacock feels assured, that had he jarred but once a day this season, he should have lost his entire crop.

Mr. John Rae, of Port Stanley, sent a package containing the largest number ever received from one person, numbering about 3,500. He began jarring on the 28th of May, but did not count the proceeds of the first day's work.

May 29th.	Morning	-	50	-	Evening	98
" 30th.	"	-	88	-	"	105
" 31st.	"	-	173	-	"	134
June 1st.	"	-	203	-	"	108
" 2nd.	"	-	134	-	"	85
" 3rd.	"	-	141	-	"	183
" 4th.	"	-	110	-	"	71
" 5th.	"	-	87	-	"	36
" 6th.	"	-	160	-	"	5
" 7th.	"	-	24	-	"	33
" 8th.	"	-	17	-	"	19
" 9th.	"	-	22	-	"	71
" 10th.	"	-	42	-	"	47
" 11th.	"	-	15	-	"	12
" 12th.	"	-	14	-	"	10
" 13th.	"	-	10	-	"	10
" 14th.	"	-	10	-	"	8

Those that were taken after the 14th of June were but few at a time and were not counted. Nearly the whole of these curculios were taken from ten plum trees, notwithstanding which, they matured fair crops of fruit. Later in the season, I received from Mr. Rae a small branch from one of his plum trees, (Lombard) with fruit on it; they were growing about as closely packed as I ever remember to have seen them.

Although the reports sent by these gentlemen, would seem to indicate an increase of the curculio trouble, I do not think that this is generally the case. In my own garden, I have found but very few, and judging from the quantities of plums brought to market, by parties who take little or no pains to preserve their fruit, they surely must have been less numerous this year than usual.

SYNOPSIS OF THE ADDRESS OF THE HON. MARSHALL P. WILDER, PRESIDENT OF THE AMERICAN POMOLOGICAL SOCIETY.

This able address, delivered before the Society at its last meeting held in Richmond, Virginia, is well worthy the attentive perusal of every lover and grower of fruit. We condense from it a few of the more prominent thoughts which are specially valuable as well in our own Dominion as elsewhere. Speaking of the lessons of experience, he says the observations of the last few years, under the influence of warm, dry seasons, would appear to have established the principle that such weather, without excessive drought, especially in the earlier part of the summer, is more favourable to the perfection and ripening of fruits, particularly of grapes, than cold, wet seasons. These conditions are also peculiarly advantageous for the formation of fruit buds, and the storing up of the necessary perfected food for a future crop, and for the ripening of the wood, so necessary that it may endure the winter with safety.

We see also the importance of thorough draining of our fruit lands, which produces in soils, not naturally possessing them, the conditions of warmth and dryness, thus rendering the earth in these respects analogous to the condition of the air. Besides this advantage there is secured a thorough aeration of the soil, whereby it is enabled to absorb fertilizing matter from the atmosphere, rain and snow, and from the moisture drawn up from the springs below. Thus, paradoxical as it may seem, the same means which guard against excessive wet serve also to supply moisture in excessive droughts.

Another lesson, most impressively taught, is that the cultivation of our orchards should be shallow, so as not to injure the roots, but to preserve them near the surface; and that manure applied to fruit trees should be either in the form of a top dressing, or as near the surface as is consistent with the composition of the soil and the preservation of its fertilizing elements. Also, it may now be considered as fixed that mulching for dry seasons and soils, whereby the temperature and moisture of the soils are kept uniform, and the fertilizing elements maintained in a soluble state, is of great advantage, inasmuch as these conditions are essential for the production of perfect fruit.

We have also learned that large fruit will sell better than small—that even the Seckel pear, which once commanded in Boston market the highest price, will not now sell, unless of extra size, for any more, if as much, as common varieties of a larger size. Hence, to meet this demand, the fruit must not only have good cultivation, but must be thinned.

The importance of shelter is year by year becoming more generally appreciated. The fact is established that the removal of forests diminishes the quantity of rain, increases the evaporation of moisture, reduces the temperature, and subjects our fruit to greater vicissitudes. We may find varieties, and probably shall, adapted to exposed situations; but at present the large majority of our finer fruits will be benefitted by the shelter of belts of forest trees.

The venerable President commends again the important and benevolent work of originating new varieties of fruit, both as a means of improvement and as a substitute for those which have experienced the decline incident to all things of human origin. The acquisitions already made give promise of still richer rewards. Much has already been done, but this branch of science is yet in its infancy. It may require time and patience and care to produce a superior variety, but we have the most cheering assurance of the time when every section of our country shall possess fruits adapted to its own locality. We have learned many of the laws which govern hybridization; and the more we become acquainted with this most interesting art, the more we work with nature in these efforts for her improvement, the more shall we admire this most perfect and beautiful illustration of the great fundamental law, which has been established from the beginning of time, for the improvement of men, animals and plants. Well did Linnæus exclaim, when overwhelmed by the discovery of an unknown principle in this most interesting study, "I have seen God passing by." Let us go on, then, developing the wonderful resources of this art.

He speaks also of the importance and value of this calling in developing the resources of our country, in the occupation of unimproved lands, adorning our homesteads, enhancing the value of real estate, multiplying the blessings and comforts of life, and promoting a great source of national wealth; and refers to the benign influence which this employment has upon the moral and religious instincts of the heart, the refinement of taste and the welfare of society.

Then glancing at the necrology of the year, and briefly alluding to the labours of those associates who have gone to their reward, he concludes his very able address with the expression of his hope that the Society may go on conferring blessings on the country until every hearthstone and fireside shall be gladdened with the golden fruits of summer and autumn, until thanksgiving and the perfume of the orchard shall ascend together like incense from the altar of every family, and the whole world realize, as in the beginning, the blissful fruition of dwelling in the "Garden of the Lord." And when, at last, the chain of friendship which has bound so many of us together in labour and love shall be broken; when the last link shall be sundered, and the fruits of this world shall delight us no more; when the culture, training and sorrows of earth shall culminate in the purity, perfection, and bliss of heaven, may we all sit down together at that feast of immortal fruits,

"Where life fills the wine cup, and love makes it clear.
Where Gilead's balm in its freshness shall flow
O'er the wounds which the pruning knife gave us below."

APPENDIX (E).

ANNUAL REPORT

OF THE

ENTOMOLOGICAL SOCIETY OF ONTARIO, 1871,

INCLUDING A REPORT ON SOME OF THE NOXIOUS AND BENEFICIAL
INSECTS OF THE PROVINCE OF ONTARIO.

PREPARED FOR THE HONOURABLE THE COMMISSIONER OF AGRICULTURE, ON
BEHALF OF THE SOCIETY.

BY

THE REV. C. J. S. BETHUNE, M.A.,

*Head Master of Trinity College School, Port Hope; President of the Entomological Society of
Ontario; and Editor of the Canadian Entomologist:*

WILLIAM SAUNDERS,

Vice-President of the Entomological Society of Ontario; and

EDMUND BAYNES REED,

Secretary-Treasurer of the Entomological Society of Ontario.

REPORT OF THE ENTOMOLOGICAL SOCIETY OF THE PROVINCE OF
ONTARIO, FOR THE YEAR 1871.

To the Honourable the Commissioner of Agriculture,—

SIR,—I have the honour to submit for your consideration the Report of the Entomological Society of Ontario for the year 1871, with the Constitution and By Laws, a detailed statement of receipts and expenditures, its proceedings during the year, and also a list of the office-bearers elected for the year 1872.

The annual meeting of the Society was held at the City of Kingston, at the same time as the Exhibition of the Agricultural and Arts Association, according to our Statute of Incorporation. and the various Reports were then presented and approved of.

I have also the pleasure of submitting herewith a Report on some of the noxious and beneficial insects of this Province, which has been prepared on behalf of the Society, by the Rev. C. J. S. Bethune, M. A., Mr. William Saunders, and Mr. E. B. Reed.

The Society still continues the monthly publication of "THE CANADIAN ENTOMOLOGIST" which has now nearly reached the completion of its third volume, and I feel great pleasure in being able to inform you that our little periodical has elicited warm approval both in England and the United States, from Entomologists, whose position in the scientific world renders such approbation most grateful and encouraging to us. The Society has now some 250 members, and has branches established at London, Kingston and Quebec.

I have the honour to remain
Your obedient servant,

EDMUND BAYNES REED,
Secretary-Treasurer of the Entomological Society of Ontario.

London, Ont., October 25th, 1871.

THE ENTOMOLOGICAL SOCIETY OF ONTARIO.

A general meeting of the Entomological Society of Canada, was held in the rooms of the Canadian Institute, Toronto, on Thursday morning, March 2nd, 1871. E. Baynes Reed, Esq., (London), Vice President, occupied the chair. A goodly number of members were present, including several from the London Branch of the Society.

The minutes of the last meeting, and the Report of the Committee on the Cabinet for the Agricultural and Arts Association, were read and adopted.

Letters were also read from Prof. Hincks, Messrs. Couper, Cowdry, and Websdale.

The application of certain gentlemen at Kingston, Ontario, who desire to form a Branch of the Society there, was read, and on motion laid over to the afternoon meeting for consideration.

Mr. Reed read the correspondence with the Bureau of Agriculture of Ontario, and gave a statement of the proceedings that had taken place with reference to the incorporation of the Society. He also read the following "Act to amend the Agricultural and Arts Act," which had been passed at the recent session of the Legislature.

ACT OF INCORPORATION OF THE ENTOMOLOGICAL SOCIETY OF ONTARIO.

Extracted from the Agricultural and Arts Act, 34 Vic., 1870-71.

That the following new section and sub-section, read as and be section 33 of 31 Vic., cap. 29:—

"The Society now existing and known as the 'Entomological Society of Canada,' may organize and form themselves into a Society, comprising not less than twenty-five members, and paying an annual subscription of not less than one dollar each, to be known as 'The Entomological Society of Ontario,' and shall have power to adopt a Constitution, and make By Laws for the admission of members, and for its guidance and proper management, and the promotion of any objects consistent with the study of Entomology and its practical bearing upon the Agricultural and Horticultural interests of the Province of Ontario, and not inconsistent with the laws of the Province; and on filing a copy of such Constitution and By-Laws with the Commissioner of Agriculture, such Society shall become a body corporate under this Act.

"(1). And such Society shall be entitled to receive, from unappropriated moneys in the hands of the Treasurer of Ontario, a sum not to exceed five hundred dollars in any one year.

"(2). The said Society shall hold an annual meeting at the place and during the same time, as the Exhibition of the Agricultural and Arts Association is being held, in each and every year; and shall, at such meeting present a full report of its proceedings, and a detailed statement of its receipts and expenditures for the previous year, and shall, at such meetings, elect a President, Vice-President, Secretary and Treasurer, (or a Secretary-Treasurer), and not fewer than three, nor more than five Directors; and they shall also elect two Auditors.

"(3). A copy of the Annual Report of its proceedings, and a list of the office-bearers elected, and also a Report of such information as the Society may have been able to obtain on

the subject of insects beneficial or injurious to the farm and the garden, with such appropriate illustrations as the Society may have been able to obtain, shall be sent to the Commissioner of Agriculture within thirty days after the holding of such annual meeting.

By another section the President of the Entomological Society of Ontario, is made a member *ex-officio* of the Council of the Agricultural Society."

It was then moved by Mr. Wm. Saunders, seconded by the Rev. C. J. S. Bethune,—

That the Entomological Society of Canada, gladly avails itself of the benefits arising from the liberality of the Government of Ontario, as set forth in the amended Agricultural Act; and that the meeting do now proceed to comply with the requirements of the Act of Incorporation.—*Carried.*

Mr. Saunders then gave notice that at the next meeting of the Society, he would move that the Constitution be amended so as to bring it into accordance with the Act of Incorporation.

The meeting then adjourned.

AFTERNOON MEETING.

A second meeting of the Society was held, pursuant to notice, at 3 o'clock, P.M., on the same day as the preceding, and at the same place. The President, Prof. Croft, occupied the chair. The minutes of the previous meeting were read and adopted.

In accordance with the notice of motion given by Mr. Saunders at the former meeting, the Constitution of the Society was taken up for discussion, and amended in accordance with the provisions of the Act of Incorporation.

The following gentlemen were then elected to hold office for the year 1871:—

PRESIDENT.—Rev. C. J. S. Bethune, M.A., Trinity College School, Port Hope.

VICE-PRESIDENT.—W. Saunders, Esq., London.

SECRETARY-TREASURER.—E. Baynes Reed, Esq., London.

DIRECTORS.—Prof. Croft, University College, Toronto; J. M. Denton, Esq., London; and R. V. Rogers, Esq., jun., Kingston.

AUDITORS.—J. H. Griffith, Esq., and C. Chapman, Esq., London.

The following gentlemen were elected members of the Society:—

A. B. Bennett, Esq., Brantford, Ontario, and D. W. Beadle, Esq., St. Catharines, Ontario.

The application from Kingston for the formation of a Branch of the Society there, laid over from the previous meeting, was received, and permission was granted to establish a branch, in accordance with the terms of the Constitution of the Society.

After some discussion it was resolved that the clause in the Constitution relating to the balloting of new members be held in abeyance until the next annual meeting of the Society, and that in the mean time, any person be admissible, as an ordinary associate member, on payment of one dollar. The annual subscription of members, entitling them to a copy of the *Canadian Entomologist* and all other publications of the Society free of charge, had been previously reduced in the amended Constitution to one dollar per annum. It was resolved to transfer the printing and publication of the *Canadian Entomologist* to London, to increase its size, and issue it in a much more attractive form, embellishing its pages with suitable illustrations. The Rev. C. J. S. Bethune, was unanimously requested to continue to act as Editor, and Messrs. Saunders, Reed, and Denton were appointed a Committee to assist him in the work. The sum of one hundred dollars per annum was also voted to be paid to the Editor from the Society's funds.

The following resolutions were adopted:—"That the hearty thanks of this Society are tendered to the Rev. C. J. S. Bethune, for his untiring zeal and activity while holding the office of Secretary-Treasurer, during the last eight years."

The meeting then adjourned.

On the 11th day of May 1871, the Secretary filed a copy of the Constitution and By Laws with the Commissioner of Agriculture, and the Society became thereby incorporated under the Statute; the head quarters being Toronto, and branches being established at London, Kingston, and Quebec.—(*Vide Constitution at the end of this Report.*)

ANNUAL MEETING 1871.

The first general annual meeting of the Society was held on Wednesday evening, September 27th, 1871, at half-past seven o'clock, at the Lecture Room of Queen's College, Kingston, the use of which had been kindly granted for the occasion.

The Vice-President, W. Saunders, Esq., occupied the chair.

The minutes of the previous meeting were read and approved.

The chairman read a letter of apology from the President, Rev. C. J. S. Bethune, regretting his inability to attend the meeting, and stating that his address had been forwarded.

The Secretary-Treasurer presented his annual statement, for the year ending September 23rd, 1871, showing a balance in hand of \$233 73, and explaining that the whole of this sum would be exhausted during the current year, in printing the remaining six numbers of the *Entomologist*, and meeting current expenses.

The accounts and statements had been duly audited.

On motion duly carried.

The Treasurer's account was received and adopted.

The Secretary reported verbally on behalf of the Council, That, as the programme for 1871, had been fully discussed and laid down at the last meeting held in April, and no new matters had since arisen, it had not been considered expedient to call a Directors' meeting during the year. The Kingston Branch had been fairly started and now consisted of some ten members, with a fair prospect of increasing its numbers. The publishing of the *Entomologist* had been transferred to London, where very satisfactory arrangements had been made for printing. Owing to the difficulty in procuring a suitable curator at Toronto, the Society's cabinets and collections had been transferred to the care of the London Branch. This arrangement, however, was only temporary. The Directors had also made provisions for the preparation of a special report on insects, to be presented on behalf of the Society to the Commissioner of Agriculture.

The election of officers for the ensuing year then took place with the following result:—

President.—Rev. C. J. S. Bethune, M.A., Trinity College School, Port Hope.

Vice-President.—W. Saunders, Esq., London, Ontario.

Secretary-Treasurer.—E. Baynes Reed, Esq., London, Ont.

Council.—Prof H. Croft, University College, Toronto; Prof. J. Macoun, Albert College, Belleville; R. V. Rogers, Esq., Kingston; J. M. Denton, Esq., London; J. Pettit, Esq., Grimsby.

Auditors.—J. H. Griffith, Esq., and C. Chapman, Esq., London.

A discussion then took place upon the subject of illustrating the *Entomologist*, and some information was given as to the relative expense of procuring electrotypes and lithographs. General satisfaction was expressed at the improved *status* and condition of the Society, and at the change which had been made in the publishing and appearance of the *Entomologist*.

The Secretary took occasion to reciprocate the kindly sentiments that the President of the Fruit Growers' Association had so courteously expressed in his Annual Address, the night previous, with regard to the Entomological Society of Ontario. It was sincerely to be hoped that the two Sister Societies, may long continue to work together in such harmony, and that the results of their respective labours may be felt and appreciated by the country at large.

The meeting then adjourned.

TREASURER'S REPORT, FOR THE YEAR ENDING SEPTEMBER 23RD, 1871.

Receipts.

Balance from 1870.....	\$ 34 97
Members' Fees—Arrears, Members	\$12 00
“ “ “ Branches	10 00
“ “ 1871, Members	75 00
“ “ “ Branches	15 00
	<hr/>
	112 00

Grant from Bureau of Agriculture.....	\$500 00
Sale of Cork. Pins &c.	55 97
Sale of back Nos. of <i>Can. Ent.</i>	16 07
Donation	1 00
Various small amounts	14 89

Expenditure.

Working Expense account	\$77 92
Engraving	27 25
<i>Canadian Entomologist</i> : Printing Nos. 10, 11, 12, Vol. II, and Nos. 1, 2, 3, 4, 5, 6, Vol. III.....	330 91
Pins.....	11 80
Library account	41 95
Various small accounts.....	11 34
Balance in Bank of Montreal (which will be absorbed this year in printing <i>Entomologist</i> , and current expenses).....	233 73
	<hr/>
	\$734 90 734 90

We certify that the above is a correct statement of accounts, for the year ending September 23rd, 1871, as shewn by the Treasurer's Books, with vouchers for all disbursements.

JOHN H. GRIFFITH, } *Auditors.*
CHARLES CHAPMAN, }

London, Ont, September 23rd, 1871.

ANNUAL ADDRESS OF THE PRESIDENT OF THE ENTOMOLOGICAL SOCIETY OF
ONTARIO, 1871.

To the Members of the Entomological Society of Ontario:

GENTLEMEN,—It is with no ordinary feelings of pleasure and satisfaction that I offer you my congratulations upon the continued success and prosperity of the Entomological Society of Ontario. We are now met together to hold our *first* Annual Meeting under our Act of Incorporation, and as a Public Society duly recognized by the Government of the Province, and closely associated with the Agricultural and Arts Association of Ontario, who are now holding their great Annual Exhibition in this city of Kingston. As we have now attained to a position so much superior to anything we anticipated a few years ago, it may not be amiss to give a brief account of the origin and progress of the Society, and of the work it has been able to accomplish.

The origination of the Society may be traced to the publication in the number of the *Canadian Naturalist and Geologist* for June, 1862, of a "List of Entomologists in Canada," prepared by Mr. Saunders of London, Ont., and myself. As this list contained the names of thirty-six persons interested in the collection and study of Insects, it was resolved to hold a meeting and endeavour to form a Society or Club of those engaged in this branch of Natural Science. In the following September, accordingly, ten gentlemen assembled at the residence of Professor Croft. in Toronto, and decided upon the formation of an Entomological Society, whose objects should be: 1st. The preparation of as complete a collection as possible of Canadian insects, to be kept in some central place for general information and reference. 2nd. The charge of a depository of duplicate specimens contributed by Entomologists for distribution amongst its members; and 3rd. The holding of meetings from time to time for mutual information and the advancement of the science throughout the country at large. As so few were present at this meeting, no definite organization was attempted at the time, but the matter was laid over until the following spring.

On the 16th of April, in the following year, 1863, the Society was at length duly organized under the Presidency of Prof. Croft, and with Mr. W. Saunders as Secretary-Treasurer, and the late Rev. Prof. Hubbert as Curator. The names of about twenty-five persons were

enrolled as original members. During the year meetings were held from time to time, and several more names were added to the list of members.

The next year, 1864, was one of great progress, being signalized by the formation, in March, of a branch, with ten original members, at Quebec, Canada East; and of another in July, at London, Canada West, with thirteen original members. A preliminary list of Canadian Lepidoptera, embracing 144 species of Butterflies, Bombyces and Sphinges, was published by the Society during the year. In 1865 many additions to the roll of membership were made, and much good work was done, including the publication of a second list of Canadian Lepidoptera, containing the names of 350 more species. During the following year, 1866, the Society held but few meetings and effected little, owing to the disturbance caused by the Fenian raid and the call made upon many members to leave their homes and join the ranks of the volunteer service. The year 1867 was marked in the annals of the Society by the publication of a valuable list of Canadian Coleoptera, which included no less than 55 families, 432 genera, and 1,231 species, being many times more than had ever been previously enumerated in a Canadian list.

In August, 1868, the Society issued the first number of the *Canadian Entomologist*, a small monthly periodical, devoted to the publication of original papers on the classification, description, habits and general history of Insects. This little serial has been received with much favour by the leading Entomologists of America, many of whom have from time to time contributed to its pages. It has now reached the middle of its *third* volume, and has increased to three times its original dimensions; it has also improved much in style and typographical appearance, as well as in the excellence of its illustrations.

Until December, 1869, the Society received no extraneous assistance or public recognition, but depended wholly for its maintenance upon the efforts of its members. At that time, however, it was voted a grant of \$400, for the year 1870, by the Board of the Agricultural and Arts Association of Ontario, on condition that it furnished an Annual Report, formed a cabinet of insects useful and prejudicial to agriculture and horticulture, and continued the publication of the *Canadian Entomologist*. These conditions were severally complied with by the continuance and improvement of our periodical, the formation of a cabinet of insects, arranged in an economical point of view, and placed in the rooms of the Association at Toronto, and by the publication of a report upon the insects affecting the Apple, Grape, and Plum, prepared by Messrs. Saunders, Reed, and myself. The singular favour accorded by the public to this report, and the fact that an edition of three thousand copies was speedily exhausted, sufficiently attest its value.

The present year, 1871, has been signalized by the Incorporation of the Society by the Legislature of Ontario, at the instigation of the Bureau of Agriculture, and the grant to its funds by the Government of \$500 a year. By the same Act, moreover, your President is entitled to take his seat as an *ex officio* member of the Board of Agriculture and Arts. Among the marks of progress of the year, mention must by no means be omitted of the formation of a *third* branch of the Society, at Kingston, which we trust will long continue to grow and prosper.

Such, gentlemen, is a brief account of the origin and progress of our Society, the recital of which has not, I trust, proved uninteresting to you. When we look back upon our growth and development, we must all, I am sure, feel cheered and encouraged to continue our work, and strive by our united efforts, to make the Entomological Society of Ontario a credit and a blessing to our land.

Before concluding, I feel that it is my painful duty to remind you of the loss which our Society and the cause of Natural Science generally in this Province has sustained in the recent death of Prof. Hineks, of University College, Toronto. He joined us in our first attempts at organization, and continued our steady friend and supporter till a few months ago. Though his special studies were chiefly devoted to another department of Nature, he yet took a lively interest in Entomology, and was a frequent attendant at our meetings. He died at a ripe old age, and has left a mark upon the scientific records of our country which will not soon be effaced.

Thanking you, gentlemen, for the honour you have done me in calling upon me to preside over you during the past year, and trusting that our Society will continue to grow and prosper, and be zealously maintained by us all,

I have the honour to be, gentlemen,

Your obedient servant,

CHARLES J. S. BETHUNE.

Port Hope, September 27th, 1871.

CATALOGUE OF ENTOMOLOGICAL BOOKS BELONGING TO THE SOCIETY.

Westwood's Introduction, 1839	2	Volumes.
Canadian Naturalist, 1, 2, old series	2	"
Natural History of the Tineina: by H. T. Stainton	12	"
British Tortrices: by S. J. Wilkinson.....	1	"
Proc. Ent. Soc., Philadelphia, 1861-1867.....	6	"
Say's Entomology: by Le Conte.....	2	"
Harris' Insects Injurious to Vegetation: Col. Ed.....	1	"
Proc. Acad. Sci., Philadelphia, 1856-1871.....	10	"
Kirby's Fauna Boreali-Americana: Insecta. Norwich, 1837, 4to	1	"
Brodrip's Zoological Recreation	1	"
Cowan's Curious Facts in Insect History	1	"
Catlow's Popular British Entomology	1	"
The Practical Entomologist: Walsh.....	2	"
Record of Zoological Literature: Arachnida, Myriapoda, Insecta, 1868-69	2	"
Record of American Entomology: by A. S. Packard, 1868-69-70.....	3	"
Kirby & Spence. Introduction to Entomology. 8vo. 1826	4	"

Smithsonian Publications.

Catalogue of the described Lepidoptera of North America: by J. G. Morris, 1860, p.p. 76, 8vo.	1	"
Synopsis of the Lepidoptera of N. America: by J. G. Morris, pt. 1, 1862, p.p. 376, 8vo.	1	"
Catalogue of the described Coleoptera of the United States: by F. E. Melsheimer, 1853, p.p. 174, 8vo.	1	"
Classification of the Coleoptera of North America: by J. L. LeConte, part 1, 1861, p.p. 278, 8vo.	1	"
List of Coleoptera of North America: by John L. LeConte; part 1, 1863-6, p.p. 80, 8vo.	1	"
New Species of North American Coleoptera: by J. L. LeConte; part 1, 1863-6, p.p. 180, 8vo.	1	"
Synopsis of the Neuroptera of North America: by H. Hagen, 1861, p.p. 368, 8vo.	1	"
Coleoptera of Kansas and Eastern New Mexico: by Dr. J. L. LeConte, 1 vol. 4to., 1860, p.p. 58, plates.....	1	"
Catalogue of the described Diptera of North America: by R. Osten Sacken, 1858, p.p. 116, 8vo.	1	"
Monograph of the Diptera of North America: by Loew and Osten Sacken, part 1, 1862, p.p. 246, 2 plates; part 2, 1864, p.p. 340, 5 plates, 8vo.	2	"
The Genera of British Moths, vol. ii: by Noel Humphreys.....	1	"
Histoire Naturelle des Insectes Lepidopteres, par Boisduval et Gueneé, vols. 1 and 5-10, 8vo. with 1 vol. coloured plates. Paris, 1836-1857....	8	"
Le Conte's Cicindelidæ of the United States, 1 vol. 4to. Philadelphia, 1856.....	1	"
Le Conte's Buprestidæ of the United States, 1 vol. 4to. (Trans. Amer. Phil. Soc., 1859).....	1	"
Le Conte's Elateridæ of the United States, 1 vol. 4to. (Trans. Amer. Soc., 1853).....	1	"
Le Conte's Coleoptera from boundary line between United States and Mexico, 1 vol. 4to. Philadelphia, 1858.....	1	"
Le Conte's Melolonthidæ of the United States, 1 vol. 4to. Philadelphia, 1856	1	"
Le Conte's Miscellaneous Papers on Coleoptera; 11 pamphlets	11	"
Contributions to the Natural History of Nova Scotia: by J. Matthew Jones—Insecta, Coleoptera, part 1. Halifax, Nova Scotia, 1870, 1 vol. Paper	1	"

CONSTITUTION
OF
The Entomological Society of Ontario,
Incorporated 1871.

SECTION I.—(OBJECTS AND MEMBERSHIP.)

1. The Society shall be called the "Entomological Society of Ontario," and is instituted for the investigation of the character and habits of insects, the improvement and advancement of Entomological Science, and more especially its practical bearing on the Agricultural and Horticultural interests of the Province. The Society shall consist of not less than twenty-five members.

2. The Society shall consist of four classes, viz:—Members Ordinary, Life, Associate, and Honorary.

3. Ordinary Members shall be persons whose pursuits, or studies, are connected with Entomology, or who are in any way interested in Natural History.

4. Life Members shall be persons who have made donations to the value of \$25 in money, books or specimens (the two latter to be valued by competent persons), or who may be elected as such at the General Meeting of the Society, for important services performed, and after due notice has been given.

5. Associate Members shall be persons residing out of the Dominion of Canada, whose pursuits or interests are similar to those of Ordinary Members. They shall have all the privileges of Ordinary Members except that of voting.

6. Honorary Members shall be members of high standing and eminence for their attainments in Entomology.

7. The number of Honorary Members shall be limited to twenty-five.

8. The Officers of the Society shall consist of a President, a Vice-President, a Secretary-Treasurer, and not fewer than three, and not more than five, Directors, to form a Council; all of whom, with two Auditors, shall be elected annually at the Annual General Meeting of the Society, and shall be eligible for re-election. The said Council shall, at their first meeting, appoint a Curator.

SECTION II.—(ELECTION OF MEMBERS.)

1. All candidates for admission into the Society as Members, Associate Members, or Life Members, must be proposed by a member at a regular meeting of the Society, and be balloted for; the affirmative vote of three-fourths of the members present shall be necessary for the election of a candidate.

2. Honorary Members must be recommended by at least three members, who shall certify that the person named is eminent for Entomological attainments; the election in their case shall be conducted in the same manner as laid down for other members.

3. Whenever any person is elected a member in any class, the Secretary shall immediately inform him of the same by letter; and no person shall be considered a member until he has signified his acquiescence in the election.

4. Every person elected a member is required to pay his first contribution within one month of the date of his election; otherwise his election shall be null and void.

SECTION III.—(CONTRIBUTIONS.)

1. The annual contribution of Ordinary and Associate Members shall be one dollar; all contributions to be due in advance on the first day of January in each year, the payment of which shall entitle the member to a copy of all the publications of the Society during the year. All new members, except those elected at and after the Annual General Meeting, and before the following first of January, shall be required to pay the subscription for the year in which they are elected.

2. Every member shall be considered to belong to the Society, and as such be liable to the payment of his annual contribution, until he has either forfeited his claim, or has signified to the Secretary in writing his desire to withdraw, when his name shall be erased from the list of members.

3. Whenever any member shall be one year in arrear in the payment of his annual contribution, the Secretary shall inform him of the fact in writing. Any member continuing two years in arrears shall be considered to have withdrawn from the Society, and his name shall be erased from the list of members.

4. Life and Honorary Members shall not be required to pay any annual contribution.

SECTION IV.—(OFFICERS.)

1. The duties of the President shall be to preside at all meetings of the Society, to preserve good order and decorum, and to regulate debates.

2. The duties of the Vice-President shall be the same as those of the President during his absence.

3. The duties of the Secretary-Treasurer shall be to take and preserve correct minutes of the proceedings of the Society, and to present and read all communications addressed to the Society; to notify members of their election, and those in arrear of the amount of their indebtedness; to keep a correct list of the members of the Society, with the dates of their election, resignation, or death, and their addresses; to maintain the correspondence of the Society, and to acknowledge all donations to it. He shall also take charge of the funds of the Society, and keep an accurate account of all receipts and disbursements, and of the indebtedness of the members, and render an annual report of the same at the Annual General Meeting of the Society, in the manner required by the Act respecting the Board of Agriculture and Arts.

4. It shall be the duty of the Curator to take charge of all books, specimens, cabinets, and other properties of the Society; to receive and arrange in their proper places all donations of specimens; to keep a record of all contributions of books and specimens, with a list of the contributors; and to oversee and direct any exchange of specimens. He shall, also, report annually to the Society on the condition of the specimens and cabinets under his care.

5. The Officers of the Society shall form a Council, who shall have the direction and management of the affairs of the Society. The Council shall meet once in every quarter, the time and place of meeting to be appointed by the President, and notice to be given to the Secretary at least ten days beforehand.

6. The Council shall draw up a yearly report on the state of the Society, in which shall be given an abstract of all the proceedings, and a duly audited account of the receipts and expenditure of the Society during their term of office; and such report shall be read at the Annual General Meeting.

SECTION V.—(MEETINGS.)

1. Ordinary Meetings shall be held once a month, on such days and at such hour as the Society by resolution may from time to time agree upon.

2. The Annual General Meeting of the Society shall be held at the place and during the same time as the Exhibition of the Agricultural and Arts Association is being held in each year, to receive and deliberate upon the report of the Council on the state of the Society, to elect Officers and Directors for the ensuing year, and to transact any other business of which notice has been given.

3. Special Meetings of the Society may be called by the President upon the written request of five members of the Society, provided that one week's notice of the meeting be given, and that its object be specified.

SECTION VI.—(BRANCHES OF THE SOCIETY.)

1. Branches of the Society may be formed in any place within the Dominion of Canada on a written application to the Society from at least six persons resident in the locality.
2. Each Branch shall be required to pay to the Parent Society fifty cents per annum for each paying member on its list.
3. Every Branch shall be governed by the Constitution of the Society, but shall have power to elect its own officers, and enact by-laws for itself, provided they be not contrary to the tenor and spirit of the Constitution of the whole Society.
4. All the members of the Branches shall be members of the Society and entitled to all the privileges of Ordinary Members.
5. No Associate or Honorary Member shall be appointed by the Branches, but such members may be proposed at General Meetings of the Society by any Branch, as well as by individual members.
6. Each Branch shall transmit to the Parent Society, on or before the first of September in each year, an annual report of its proceedings, such report to be read at the Annual General Meeting.

SECTION VII.—(ALTERATION OF CONSTITUTION.)

1. No article in any section of this Constitution shall be altered or added to, unless notice be first given at an ordinary meeting of the Society, or of a Branch, and the alteration or addition be sanctioned by two-thirds of the members present at the next ensuing meeting; the Secretary of the Society, or of the Branch, shall then notify the Secretaries of all the other Branches; when the sanction of all the Branches has been obtained in the same manner, the alteration or addition shall become law.
-

REPORT

ON SOME OF THE

NOXIOUS AND BENEFICIAL INSECTS

OF THE

PROVINCE OF ONTARIO.

INTRODUCTORY.

In the following Report, the several writers are only responsible for the articles that appear under their respective names. Occupied as they are with their own professions, and having only a small portion of their leisure hours to devote to the study of their favourite science of Entomology, they would crave the indulgence of their readers for any imperfections in this Report. It has been thought advisable to refer briefly to some of the insects described in the Report of 1870, and to notice anything new about their habits or history which the experience of the past year has been able to discover.

Their chief aim has been to lay before the public, in a popular form, all the practical information that they have been able to collect, from facts given on good authority, and experiments conducted with care and perseverance, respecting the habits of the various Insects treated of, and the remedies that have been tried to counteract or terminate their ravages.

If by these Reports any desire shall be aroused to become better acquainted with the wonderful economy and history of the many beautiful and curious little creatures of the insect world, or if any advantage shall be derived herefrom by any agriculturist or horticulturist, the writers will be amply recompensed for their labours.

Acknowledgment is here gratefully made to the proprietor of the "*Canada Farmer*," for the use of many of his admirable engravings, and to the State Entomologist of Missouri, C. V. Riley, Esq., for furnishing electrotypes of his own beautiful drawings.

E. B. REED.

London, Ontario, November, 1871.

INSECTS AFFECTING THE APPLE.

ADDENDA TO THE REPORT OF 1870.

BY THE REV. C. J. S. BETHUNE, M.A.

- | | |
|---|---|
| 1. The Oyster-shell Bark-louse (<i>Aspidiotus Conchiformis</i> , Gmélín.). | 3. The Fall Web-worm (<i>Hyphantria textor</i> , Harris.). |
| 2. The White-marked Tussock Caterpillar (<i>Orygia leucostigma</i> , Sm. and Abbott.). | 4. The Codling-worm (<i>Carpocapsa pomonella</i> , Linn.). |

In our "First Annual Report on the Noxious Insects of Ontario" (published in the Report of the Honourable the Commissioner of Agriculture for 1870), we gave some account of *twenty* different species of insects that are injurious to the Apple-tree, in one portion or another of its growth, foliage or fruit. To these descriptions we purpose now to add a few remarks, in order to set before the reader any further information that we have obtained during the past year.

1. THE OYSTER-SHELL BARK-LOUSE (*Aspidiotus Conchiformis*, Gmélín).—Since the publication of our remarks upon this insect (First Report, page 73), Dr. Le Baron, the State Entomologist of Illinois, has described a new parasitic insect that, he has good reason to believe, is doing valuable service in reducing the numbers of this noxious insect. In the Western States, and—judging from the cessation of complaints on the subject—in this country also, the Bark-lice are steadily diminishing in number. This decrease is not to be attributed to human agency, but to the increase of parasitic insects that feed upon them, and especially to the labours of the tiny Chalcis fly, now made known to us by Dr. Le Baron. We may judge of the immense service performed by this little creature from the statement of Dr. Le Baron, that among eight hundred and forty-four scales on twigs, taken from different localities in Illinois, he only found fifty-seven, or about one in fifteen, that contained any eggs for another year's crop, and that twice as many of these were destroyed by Chalcides as by all other agencies combined. He gives the following account of the insect in an article in the *American Entomologist*, vol. ii, p. 361 (a most valuable publication, whose suspension we much regret):

"In the early part of the season, whilst examining the lice upon an apple tree, I noticed two or three little yellow Chalcides running along the infested twigs, which I conjectured might be the parasites of the Bark-louse, but had no proof that this was the case. But about the first of August, upon raising one of the scales, I happened to uncover one of these insects in the last stage of its transformation. Its wings were not yet unfolded, but it ran so rapidly that I had some difficulty in keeping it within the field of the lens. As soon as it paused long enough to be examined, it was easily recognized as a Chalcis by its general aspect, and especially by the peculiar vibratile motion of its short geniculate antennae.

"Having once become familiar with its appearance, I have had no difficulty in capturing, in the latter part of August and September, all the specimens I desired on the infested trees. I have repeatedly watched the female Chalcis in the act of inserting her ovipositor through

the scale of the Bark-louse, for the purpose of depositing her egg in the cell beneath. She always places herself transversely with respect to the scale. Sometimes she mounts upon it, and then her tiny body is seen to be considerably less in length than the width of the scale. Usually she backs up upon it only so far as to bring the tip of her abdomen about opposite the middle of the scale. Then bringing her ovipositor down perpendicular to her body she forces it through the scale by a series of boring or short plunging motions. Having accomplished this she remains stationary for many minutes, whilst by some invisible intestine motion the egg is carried down the ovipositor and deposited beneath the scales. So absorbed is she in this delicate operation, upon the successful accomplishment of which not only her own hopes, but those of the horticulturist, so largely depend, that nothing can deter her from it.

"The egg thus deposited hatches into a little footless larva. This larva is so admirably described by Dr. Fitch, in a single sentence, that I can not do better than copy his description: 'Under these scales I have repeatedly met with a small maggot, three-hundredths of an inch long, or frequently much smaller, of a broad oval form, rounded at one end and tapering to an acute point at the other, soft, of a honey-yellow colour, slightly translucent and shining, with an opaque brownish cloud in the middle, produced by alimentary matter in the viscera, and divided into segments, by faintly impressed transverse lines.'

"The only motion of which this small grub is capable is a slight extension and contraction of its body, particularly at the two extremities, by which its form is correspondingly modified.

"There is usually but one larva under each scale, and I have never seen more than two. In the earlier part of the season it is seen adhering to the body of the Bark-louse, but later it is found in the midst of the eggs or their remains.

"The Chalcis fly itself is a beautiful object under the microscope. Its length is a little less than half a line, or about one-twenty-fifth of an inch, though I have captured a few specimens considerably smaller, being but little more than one-third of a line. I at first supposed that these smaller individuals were males, but all the specimens that I have examined have proved to be females. Their color is a uniform pale lemon yellow. The only variation from this colour is in the minute mandibles, which are reddish brown. There are three coral-red ocelli on the summit of the head, and the ovipositor, which lies in a groove on the underside of the abdomen, exhibits a slight reddish tint. The wings are thickly beset, over nearly their whole surface, with bristly points, and their margin is ornamented with a long fringe."

Dr Le Baron has given to this useful creature the name of the Chalcideous Parasite of the Apple-tree Bark-louse *Chalcis* [*Aphelinus*] *mytilaspidis* Le Baron.)

For the benefit of those of our readers who may not have a copy of our last year's Report to refer to, we append cuts of the Oyster-shell Bark-Louse, by means of which it may be readily recognized. Fig. 1 represents a twig covered with these creatures, about the natural size. Fig. 2 affords an illustration of the



FIG. 1.

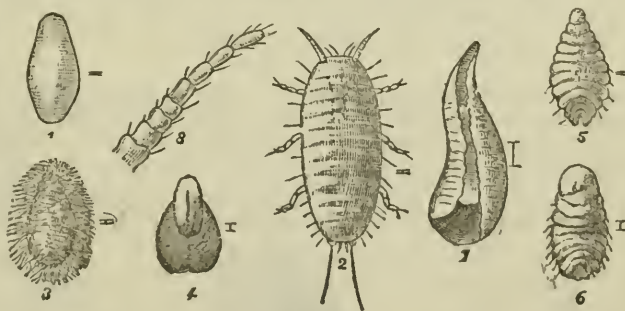


FIG. 2.

insect in all its stages, and highly magnified; the hair lines at the sides show the natural sizes. (1) The egg; natural size scarcely the one-hundredth part of an inch. (2) Larva, as it appears when running over the twigs. (3) Appearance after becoming stationary. (4) The scale after the second secretion takes place. (5) Ventral view of the louse after losing its members. (6) Ventral view of the louse when full grown, and just about to deposit

its eggs. (7) Fully formed louse, as it appears from the under side when raised. (8) Highly magnified antenna of the larva, showing the joints.

2. THE WHITE-MARKED TUSSOCK CATERPILLAR (*Orgyia leucostigma*, Smith and Abbott).—Last autumn the moths of this insect were more than usually abundant, and consequently the depredations of the larva have been greater than ordinary. Formerly we were of the opinion that these handsome yellow caterpillars (Fig. 3 represents a full-grown specimen),

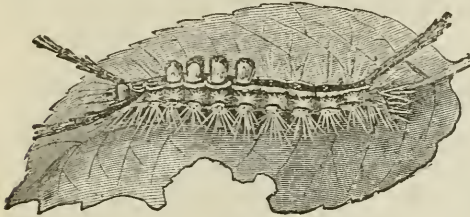


FIG. 3.

with their coral-red heads and knobs, their dorsal tufts, and their long pencils of hairs projecting in front and behind, were but slightly injurious to the apple-trees; but of late years we have been forced to come to a different conclusion. In many parts of the country they are now so numerous as to be a positive pest to the fruit-grower, and in the Western States they are reported to have stripped some orchards perfectly bare of leaves, and in numbers of instances, not content with devouring the leaves to have even attacked and very much injured the fruit itself! We would strongly recommend those of our readers who possess any apple-trees—and who does not?—to carefully inspect them all at some time during the winter, and to pluck off all the withered leaves that they find attached to the twigs. Most of these leaves that persistently cling to the trees in spite of the autumn's storms and rains, and the winter's frost and snow, will be found on examination to be attached to the twigs by a silken web, and to contain a mass of froth-covered eggs—the seed of next summer's crop of caterpillars. As the number of eggs on a single leaf ranges from three to five hundred, it will be readily perceived how great a diminution may be made in the number of caterpillars to be produced next year by the expenditure of very little labour.

Mr. Saunders (*Canadian Entomologist*, vol. iii, page 15) gives the following interesting description of the egg:—

“On removing the mass of eggs from its place of attachment, the surface of the cocoon appears covered with fragments of a transparent gelatinous looking substance, which has evidently been applied in a fluid state. The bottom layer of eggs will usually number 100 or more, and their interstices are well filled with this same gelatinous substance, which adheres so strongly to the eggs that when the nest is torn open they cannot be separated without bringing away portions of this material firmly attached. Another irregular layer of eggs is placed on this, then a third, and sometimes a fourth, before the total number is exhausted, and through the whole of these the gelatinous matter is so placed as to secure every egg, not by being imbedded in a solid mass, but surrounded by the material worked into a spongy or frothy state. Possibly this may be to economize the amount used. Over all is a heavy layer of the same with a nearly smooth greyish white surface, the whole number of eggs being placed so as to present a convex surface to the weather, which effectually prevents the lodgment of any water on it.

The egg is nearly globular, flattened at the upper side—not perceptibly hollowed—with a dark point in the centre of the flattened portion surrounded by a dusky halo. Its surface is smooth under a magnifying power of 45 diameters; but when submitted to a higher power, appears lightly punctured with minute dots. Its colour is uniformly white to the unaided vision; but the microscope reveals a ring of dusky yellow surrounding it immediately below the flattened portion. Its diameter is 1-25th of an inch.”

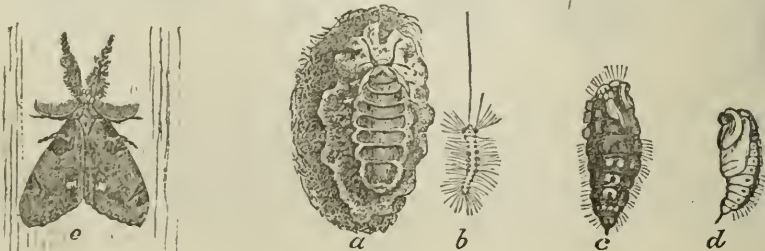


FIG. 4.

FIG. 5.

This insect, as we have before observed, is especially remarkable for the extraordinary difference it exhibits between the male and female moths; the accompanying illustrations will show this at a glance. Fig. 4 represents the winged male, a dull ashen grey insect, with beautifully feathered antennae,

Fig. 5 (*a*) represents the wingless female attached to her cocoon; (*b*) a young caterpillar suspended by a silken thread; (*c*) the female chrysalis; (*d*) the male chrysalis.

In the State of Illinois, Dr. Le Baron relates in his recent Report (page 16) that of myriads of cocoons found on and about some apple-trees that had been completely stripped of their leaves by these caterpillars, scarcely one out of a hundred had escaped the fatal visitation of parasites. "So that the race of caterpillars, so abundant and destructive this year, may be considered as practically exterminated in this locality." The parasites belonged to an undescribed species of *Tachina* (*T. orgyia*, Le Baron), a genus of two-winged flies, well known for their services to mankind in the reduction of the numbers of injurious caterpillars.

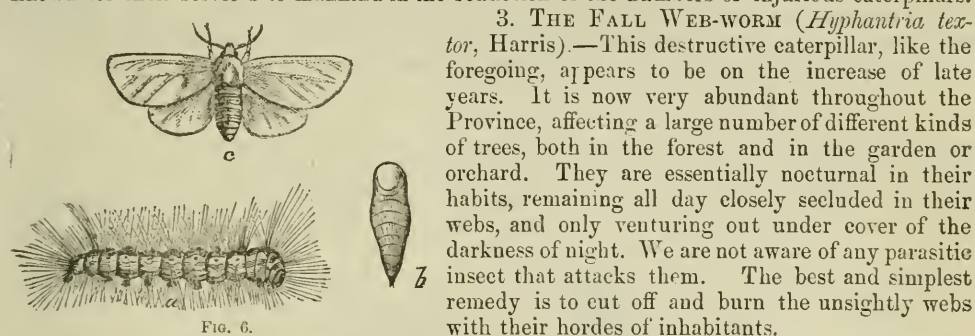


FIG. 6.

Fig. 6 shows the full-grown caterpillar *a*, the pupa, *b* which is dark brown and polished, and swells out in the centre, and *c*, the perfect moth, which is white, with a very light-yellowish shade, and has dark yellow on the thighs.

4. THE CODLING-WORM (*Carpocapsa pomonella*, Linn.).—The ravages of this horrid creature, which burrows through the fruit, and is often found, to the great disgust of the eater, at the core of the apple that he was enjoying, appear to be still on the increase in this Province. A few years ago its depredations were very serious indeed, so much so that at least a third of the yield of apples was rendered unfit for market. Though it continues to destroy thousands of dollars worth of good fruit every year, it is some little comfort to think that the amount is diminishing. The loss, however, might be still further and very materially lessened if fruit-growers would take the trouble to adopt the bandage system (see our First Report, page 92), and see that all the fallen fruit is gathered up and destroyed.

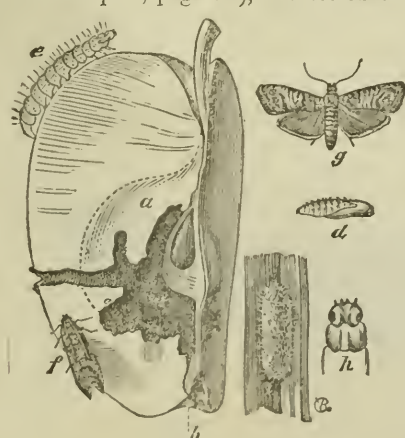


FIG. 7.

The accompanying illustration (Fig. 7) represents the insect in all its stages, and a section of an affected apple.

The remedies referred to above, and detailed in our previous Report, appear to be the only really effectual ones. Others have been frequently tried, such as fires, lights, bottles of attractive liquid, etc., but with little success, as far as the moths of this insect are concerned. Mr. Riley, in an article in the *Rural New Yorker*, gives his experience on this point as follows:—"During one whole summer, three years ago, I had a patent moth catcher constantly in a garden surrounded by several old apple-trees badly infested with this insect, and I never caught a single specimen of *Carpocapsa pomonella*. The trap was made of bright tin, with an inverted cone so placed in a basin that I could attach a light, and fill the basin with sweetened fluid. During the whole of last summer I was in the habit of working till late at night

in an office surrounded by apple orchards known to be badly infested. I worked by the aid

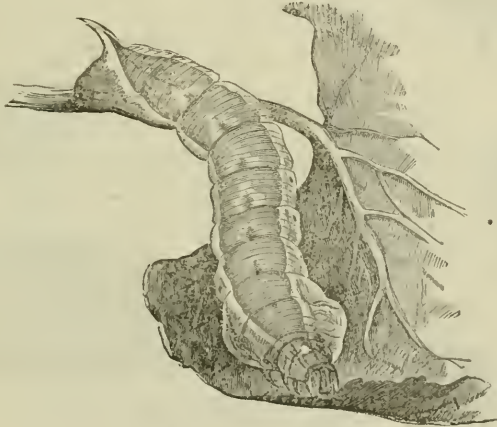
of two large kerosene lamps, each having a strong reflector, and the light in the room was so bright as to form a constant subject of conversation among the neighbours. Insects of one kind and another would fly into the room by hundreds, and on certain warm, moist evenings would beat against the windows with such rapidity as to remind one of the pattering of rain. Yet during that whole summer I caught but one or two Codling moths in that room, and there was more reason to believe that they had bred in the house than that they were attracted from without. At the same time I had hung up in an orchard close by, many wide-mouthed bottles, half filled with various liquids, such as diluted syrup, sugar water, and vinegar more or less diluted. Every two or three days these bottles would contain great numbers of insects, which were critically examined. Many of them would be small moths of one kind or another; some of them larger moths known to be injurious, and many—such as beetles, true bugs, wasps, and two-winged flies—that were beneficial. Indeed there were almost as many beneficial as injurious species. From my notes I find that but three Codling moths were caught in these bottles during the summer. Indeed, so small is the proportion of Codling moths which I have caught by the above mentioned process, that the chances of their accidentally flying into such situations are about as great as of their being attracted.”

INSECTS INJURIOUS TO THE GRAPE.

BY W. SAUNDERS, LONDON, ONTARIO.

During the past season, the insects troubling the Grape-vine have not, as far as we were able to learn, been so abundant and destructive as usual. The green sphinx caterpillar, *Chærocampa pampinatrix* (Fig. 8) has been plentiful enough in most vineyards, but we have

FIG. 8.



Colours—Green, lilac and yellow.

not heard many complaints regarding it. As a rule, it does not seriously damage vines which have acquired some age and strength, for in them the growth is rapid, and the loss of a few leaves is soon made up; but young vines are often entirely defoliated by this voracious larva in a very short period. There have been two broods of the insect this year again. Fig. 9 represents the beautiful olive green moth, from which this caterpillar is produced. It is a night-flying insect, and is attracted by light, and often finds its way into houses in the evenings.

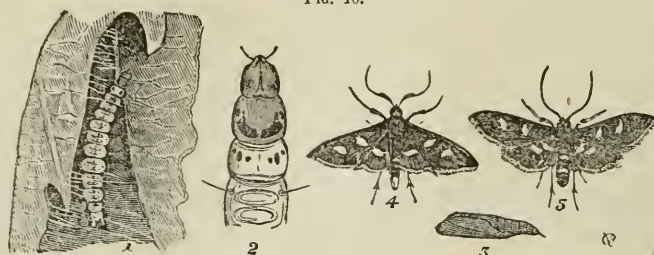
FIG. 9.



Colours—Olive-green and grey.

We have met with a few specimens of the Grape-Vine Leaf-roller (*Desmia maculalis*), a small green caterpillar, which rolls the leaf into a curious little case, and in which it lives. The accompanying fig. 10 shows the insect in its various stages.

FIG. 10.



Colours—1 and 2, grass green; 3, brown; 4 and 5, black and white.

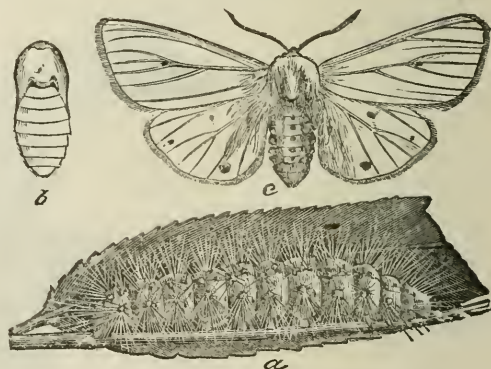
The little yellow hairy caterpillar of the Grape-vine plume moth (*Pterophorus perisceldactylus*), has been very troublesome in some localities. It attacks the foliage just as it is expanding, and consumes it along with the young clusters of blossom, having first drawn them together by a web of silken threads. These larvæ are usually found singly, but this season we have seen two and three feeding together in several instances. The moth, caterpillar and chrysalis are well shown in Fig. 11.

FIG. 11.



Colours—(a) white, (b) light brown, (d) tawny yellow.

FIG. 12.

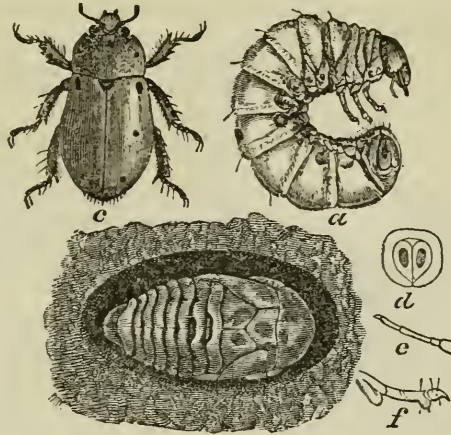


Colours—(a) yellow or brown (b) shining brown (c) white, black and orange.

The common yellow woolly bear, *Spilosoma virginica*, see Fig. 12, has been unusually numerous and destructive, especially to grapes under glass; we never remember their being so troublesome any previous season. In many vineries, to preserve the foliage it has been necessary to keep a continual watch for them and hand pick and kill them as fast as they were found.

The large spotted vine beetle, reddish yellow with black spots, *Pelidnota punctata*, has also been numerous in the neighbourhood of London, both on the wild and cultivated vines, but we have not heard of its doing much damage. Its mode of operation is to eat holes in the leaves, sometimes completely riddling them. In the accompanying Fig. 13 (a) represents the larva or grub, which lives in rotten wood; (b) the chrysalis; and (c) the fully matured beetle.

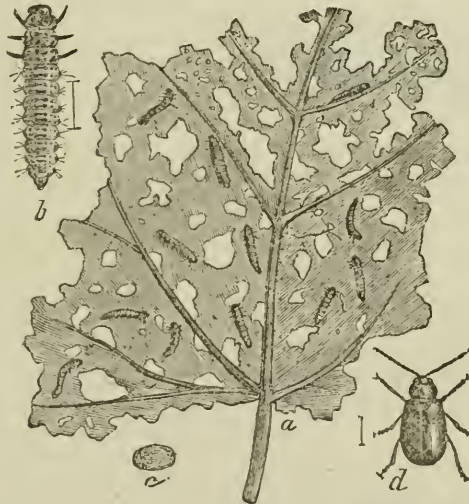
FIG. 13.



Colours—(a) glossy white, (b) yellowish, (c) reddish yellow with black spots.

We have heard a few complaints during the season, of mischief caused by the Grape-vine flea beetle, *Haltica chalybea*, but we are inclined to believe, that its ravages have been less alarming than in former years. It is most capable of doing injury just as the buds are bursting in spring, for then the beetle eats its way into them destroying the future foliage and fruit. In the Fig. No. 14, (a), shows a vine leaf, with numerous holes which have been eaten by the young larvæ, (b) the larva magnified, and (d) the perfect insect.

FIG. 14.



Colours (b) shining brown and black (d) steel blue or metallic green and purple.

FIG. 15.



The Thrip, *Tettigonia vitis*, see Fig. 15 has been very abundant in many portions of the country ; indeed we have scarcely seen a vineyard free from their attacks this year, and in many cases the vines have been much disfigured and stunted in growth. This insect is one of the worst enemies Grape growers have to contend with ; it punctures the leaves with its tiny beak and sucks their juice, causing them to become at first spotted with white, and often where the work is prolonged resulting in

their withering and dropping from the vine. In the figure the insect is magnified; the small hair lines at the sides show its natural size.

During the summer, when looking over the vineyard of W. H. Boulton, Esq., of "The Grange," Toronto, we saw a Clinton vine badly affected with the grape leaf gall louse,

FIG. 16.



Phylloxera vitifolia. When the leaves are assailed by this insect, they soon become covered with green excrescences, of various sizes and shapes, as shown in Fig. 16. In this instance it did not appear to affect more than the one vine, but if not attended to, would no doubt spread rapidly.

A full history of all the foes to grape culture thus far enumerated, as well as some others not mentioned here, may be found in the report of the Commissioner of Agriculture for 1870, to which the reader is referred, see p. 324 to 347.

There are two insects injurious to the grape, which were omitted in last year's report, whose history we will detail now.

The green grape vine worm, *Amphipyra pyramidoides*. We have found this caterpillar destructive to vines for several years past, but more particularly affecting those grown under glass, see Fig. 17; it appears early in June, and may be found full grown about the middle

FIG. 17.



of the month. Its length is from one and a quarter to one and a half inches, the body tapering towards the front, and thickened behind. The head is rather small, flattened in front, and of a whitish green colour, with the jaws or mandibles tipped with black. The body is whitish green, a little darker on the sides, with a white stripe down the back, a little broken between the segments or rings, and widening somewhat behind. There is a bright yellow stripe on each side, close to the under surface, which is most distinct on the hinder segments, and a second one of the same colour, but fainter, half way between this and the dorsal line; this latter is more distinct on the posterior portion of the body, and follows the peculiar rise or prominence on the 12th segment as shown in the figure. The under side of the body is pale green.

When full grown this caterpillar changes to a dark brown chrysalis, either at, or a little under the surface of the ground, from which the moth appears in the latter part of July. These which we have reared, have usually appeared about the 20th of the month. We have found this larva feeding on the thorn, as well as the grape, and Mr. C. V. Riley of St. Louis, Mo., has taken it on the Raspberry, the Red Bud (*Cercis Canadensis*) and the poplar.

FIG. 18.



The moth which is well represented in Fig. 18, measures when its wings are expanded about one and three quarter inches; the fore wings are dark brown, shaded with paler brown, and with dots and wavy lines of dull white. The hind wings are reddish, with almost a coppery lustre, becoming brown on the outer angle of the front edge of the wing, and paler towards the hinder and inner angle. The under surface of the wings is much lighter in colour than the upper and the body is dark brown with the hinder portion banded with lines

of a paler hue. When these prove troublesome, we can suggest nothing better as a remedy than hand picking.

Agrotis depressus Grote.—The caterpillar of this moth is of a yellowish green colour, with a few very fine brownish hairs scattered over the upper surface of the body. We have found it feeding on the grape for two summers past and in some places in numbers sufficient to be

troublesome. Its length when full grown is from one and a quarter to one and three-eighth inches; the head is rather small, green; and the jaws are tipped with brown. The upper surface of the body is yellowish green, a little paler between the rings or joints of the body; there is a whitish stripe down the back, and two of the same colour along each side, the lowest one being most distinct. on each ring or segment of the body there are several small whitish dots, scarcely visible without a magnifying glass, from each of which arises a single fine hair.

The under side of this caterpillar is of a deeper shade of green than the upper, the feet and the thick fleshy prolegs are green tipped with brown.

This pest may be found full grown from the 10th to the 25th of June. but as in colour they so closely resemble the leaves they feed on, they are seldom noticed until their destructive work attracts attention. When mature this insect also changes to a brown chrysalis a little under the surface of the ground, from which the moth is produced early in July.

The moth measures when its wings are stretched about an inch and a quarter. Its fore wings are greyish brown, with a silky lustre, with several pale dots on the front edge three short dark streaks near the middle. The hind wings are paler.

INSECTS AFFECTING THE PLUM.

BY E. B. REED, LONDON.

1. THE PLUM SPHINX MOTH (*Sphinx drupiferarum*, Smith and Abbott).

Order, LEPIDOPTERA; Family, SPHINGIDÆ.

As this moth generally makes its appearance in our plum orchards from year to year, we have thought it advisable to give a short history of its different stages for the benefit of our fruit-growers. It is a member of a family of moths to which the great naturalist, Linnæus, gave the name of *Sphingidæ*, on account of the resemblance he conceived some of their caterpillars bore, in certain positions, to the notorious Egyptian Sphinx, and which our artist has faithfully represented in the engraving of the larva. While the ravages caused by this caterpillar are fortunately not very extensive, yet it generally appears in different localities from time to time in numbers quite sufficient to cause considerable annoyance to the plum-growers of those regions. Its conspicuous size, when full grown, and its bright, green-coloured body, and mauve stripes, make it tolerably easy of detection, while the leafless twigs, the result of the voracious appetite necessary to sustain its huge carcass, are sure to cause the eyes of the observant fruit-grower to make diligent search after this monster leaf-eater. The larva (Fig. 19) is hatched from an egg, deposited (probably

FIG. 19.



Colours—Apple green, mauve stripes, orange stigmata.

singly on the underside of the leaf. By the kind permission of Mr. Wm. Saunders, we are able to give from his accurate notes a very close description of the appearance of the young larva. On the 2nd of July, a pair of *drupiferarum* were brought to him, which had been taken *in coitu*. They were confined together in a Seidlitz box. The next day the female began depositing her eggs, and continued to do so for two or three days. The following notes will be found of some interest: "Egg: length, .07 inch, slightly oval, surface smooth, colour pale yellowish-green. In from six to eight days the young larvæ made their appearance,

having eaten their way out through the side of the egg. In some cases one-half or more of the egg-shell was eaten; in others, only a hole just large enough to allow of the escape of the larva, while in a few cases it was almost entirely consumed. July 10. Some out this morning; length, .22 inch; head very large, rounded, pale yellowish-green, with a few very short, whitish hairs, mandibles tipped with dark brown, body above pale yellowish-green, with a few whitish slightly elevated tubercles on every segment, from each of which arises a single short fine hair; those along each side of the dorsal line dark brown, the others yellowish-white. The tubercles are arranged in a double transverse row on the middle and hind segments; caudal horn, .10 inch long, nearly erect, black, thickly covered with very short, stiffish black hairs, slightly furcate at the apex; each tip terminated by a pale brownish hair, longer than the others; under surface similar to upper." The larva, when full-grown, measures about three or three-and-a-half inches. Its colour is a beautiful apple-green; the head is also green, with lateral brown or black stripes. On each side of the body are seven broad oblique bands of a white colour, bordered in front with light purple or mauve. The stigmata or breathing pores are very distinct, and are of a bright orange-yellow colour. The caudal horn is long, of a dark brown colour, with a yellow tint at the base of the sides. The body is cylindrical in form, and smooth to the touch. The caterpillar, after satisfying its appetite, or upon any sudden alarm, assumes the peculiar rigid appearance shown in the cut, and will remain thus, with its head raised, for a considerable period. The formidable-looking horn on the last segment gives the insect a rather alarming appearance; but it is perfectly harmless, and in fact, even at this date, naturalists can find no use, either for offensive or defensive purposes, for this horn, which is peculiar to nearly all the caterpillars of the *Sphinxidae*. The larva of the Plum Sphinx is generally found in Ontario about the month of July, or the early part of August. When it has attained its maturity it ceases eating, and seeks shelter in the earth, where it excavates for itself a convenient chamber, which it lines with a water-proof, gummy cement, and there undergoes its transformation into the *pupa* or chrysalis state.

FIG. 20.



Colour—Dark reddish-brown.

The *pupa* (fig. 20) is about $1\frac{1}{2}$ inches in length; its colour is dark reddish-brown, and it has a short, thick projecting, or, as naturalists term it, exerted tongue-case. The insect remains in the ground all through the winter and spring, and emerges in its perfect winged state about the early part of June.

The moth (fig. 21) is a large one, its wings expanding from $3\frac{1}{2}$ to $4\frac{1}{4}$ inches. The body is about $1\frac{1}{2}$ inches long, varying slightly in the sexes as to length, that of the female being shorter, somewhat thicker and more obtuse at the anal segment, while that of the male

FIG. 21.



Colour—Black and brown, with fawn-coloured white.

is longer, and tapers almost to a point. Describing this moth from five specimens (two male

and three female) now before me, there appears very little difference in the markings of male and female. The antennæ are slightly different, but it requires some little experience in entomology to ascertain it. The head and thorax, which are large and thick, are blackish-brown, with a whitish fawn-colour at the side. The eyes are very prominent. The snout-like projection is composed of the *pulpi* or feelers, which are two close-fitting shields for the protection of the proboscis, which lies snugly coiled up between them, like the mainspring of a watch. This proboscis, or tongue, which is shown in the engraving (fig. 21), is as long as the body of the moth, and is used by the insect in extracting from flowers the honey, which forms its chief food. To a watchful observer, a sphinx moth presents a most curious appearance, not unlike that of a humming bird, while it hovers over some flower-bed, with its wings humming from their rapid and ceaseless beating, its body poised in the air, and its long tongue projecting like the beak of a bird, and dipping from time to time into the innermost recesses of the various flowers in search of food. The body of the moth is brown, with a black central line, and a black band on either side containing four or five dingy-white spots. On the back of the thorax are several fawn-coloured blotches or markings, which are peculiar to many of the *Sphingidae*, and which some of our readers may possibly have noticed in the striking resemblance to a human skull on the thorax of the English death's head moth (*Acherontia atropos*). The wings are long and very narrow, but possessing great strength, and evidently adapted for great swiftness. Their general colour is dark purplish-brown, with a stripe of white on the front edge extending from the white sides of the head, and with a fawn-coloured stripe on the outer edge of the front wing. The hind wings have two whitish wavy stripes with a similar fawn-coloured stripe on their outer edge. There are also three or four black oblique streaks on the fore-wings, and generally a black dot on the white stripe.

The engravings of this insect are the work of Mr. C. J. Beale, of Toronto, Ont.; that of the pupa and larva are adapted, with some alterations, from the excellent designs of Professor Townend Glover, of Washington; but the beautiful figure of the moth was engraved by Mr. Beale from a specimen in our own collection, and is an admirable *fac simile* of the original insect.

2. THE LEAF-CUTTER BEE (*Megachile brevis*. Say).

Order, HYMENOPTERA; Family, APIDÆ.

Our attention was attracted this summer, by the unthrifty appearance of a small plum tree, various branches of which were much disfigured by circular patches being cut out of their leaves, and bore strong indications that "an army of occupation" had forcibly annexed the tree, for their own unlawful purposes. At the first glance we thought part of the damage was caused by *Aphides* or plant lice, as some of the leaves were curled up in the manner peculiar to those insects, but a closer examination revealed the true nature of the enemy. On breaking open one of the coils, we found four or five circular chambers, the smaller and convex end of one closely fitting into the larger open end of another the whole coil being composed of numerous oval shaped pieces of leaves most ingeniously interwoven, or overlaid, and wrapped outside by the leaf to which it was affixed, the top and bottom of each cell being closed with two or three perfectly circular pieces.

Each cell contained a small white grub or maggot, comfortably ensconced therein, and provided with a supply of pollen or bee-bread, sufficient to last the little creature during its continuance in the larval state. We saw at once that the insect was the larva of some leaf-cutting bee, but it was something new to us to see the cells formed in a leaf on the tree as we had always found the cells in the ground or decayed trees, and never more than one burrow by itself. In this instance there were several coils on the tree, formed perhaps by more than one insect. We took a coil home and by dint of keeping it in a moistened jar, we succeeded in rearing two specimens of the bee, the name of which, as we are informed by Mr. C. V. Riley, to whom we sent them for identification, is *Megachile brevis*, Say. This insect,

FIG. 22.



(Fig. 22) belongs to a family of Bees called *Apidae*, many of the members of which, from their habits of building their nests, are commonly known as, mining, carpenter, mason, or upholsterer bees. The species *Megachile* to which our insect belongs consists chiefly of solitary bees, not building in societies like the common hive bee. Although it is not probable that any serious damage will ever be caused to fruit trees by this pretty little creature, inasmuch as its operations, are we believe, generally confined to other trees, yet we are tempted to give for the benefit of horticulturists a description from Rennie's admirable little work on "Insect architecture" of the habits of a very similar bee, The Rose-Leaf cutter, *Megachile centuncularis*, Latr. known also as an upholsterer bee, and whose singularly ingenious habits, have long at-

tracted the attention of naturalists. "The Rose-Leaf cutter makes a cylindrical hole in a beaten pathway, for the sake of more consolidated earth, or in the cavities of walls, or decayed wood), from six to ten inches deep. In this she constructs several cells about an inch in length, shaped like a thimble, and made of cuttings of leaves (not petals), neatly folded together, the bottom of one thimble-shaped cell being inserted into the mouth of the one below it, and so on in succession. It is interesting to observe the manner in which this bee procures the materials for forming the tapestry of her cells. The leaf of the rose-tree seems to be that which she prefers, though she sometimes takes other sorts of leaves particularly those with serrated margins, such as the birch, the perennial mercury, mountain ash, etc. She places herself upon the outer edge of the leaf which she has selected, so that its margin may pass between her legs. Turning her head towards the point, she commences near the foot-stalk, and with her mandibles cuts out a circular piece with as much expedition as we could do with a pair of scissors, and with more accuracy and neatness than could easily be done by us. As she proceeds, she keeps the cut portion between her legs, so as not to impede her progress; and using her body for a *trammel* as a carpenter would say, she cuts in a regular curved line. As she supports herself during the operation upon the portion of the leaf which she is detaching, it must be obvious, when it is nearly cut off, that the weight of her body might tear it away, so as to injure the accuracy of its curvilinear shape. To prevent any accident of this kind, as soon as she suspects that her weight might tear it, she poises herself on her wings, till she has completed the incision. With the piece which she has thus cut out, held in a bent position perpendicularly to her body, she flies off to her nest, and fits it into the interior with the utmost neatness and ingenuity; and without employing any paste or glue, she trusts as Reaumur ascertained, to the spring the leaf takes in drying, to retain it in its position.

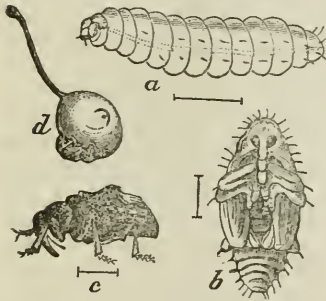
It requires from nine to ten pieces of leaf to form one cell, as they are not always of precisely the same thickness. The interior surface of each cell consists of three pieces of leaf of equal size, narrow at one end, but gradually widening at the other, where the width equals half the length. One side of each of the pieces is the serrated margin of the leaf from which it was cut, and this margin is always placed outermost, and the cut margin innermost. Like most insects, she begins with the exterior, commencing with a layer of tapestry, which is composed of three or four oval pieces, larger in dimensions than the rest, adding a second and a third layer proportionately smaller. In forming these, she is careful not to place a joining opposite to a joining, but with all the skill of a consummate artificer, lays the middle of each piece of leaf over the margins of the other, so as by this means both to cover and strengthen the junctions. By repeating this process, she sometimes forms a fourth or fifth layer of leaves, taking care to bend the leaves at the narrow extremity or closed end of the cell so as to bring them into a convex shape. When she has in this manner completed a cell, her next business is to replenish it with a store of honey and pollen, which, being chiefly collected from thistles, forms a beautiful rose-coloured conserve. In this she deposits a single egg, and then covers in the

opening with three pieces of leaf so exactly circular, that a pair of compasses could not define their margin with more accuracy. In this manner the industrious and ingenious upholsterer proceeds till the whole gallery is filled, the convex extremity of the one fitting into the open end of the next, and serving both as a basis and as the means of strengthening it. This little rose-leaf cutter, pursuing her work with the nicest mathematical art, using no artificial instruments to form her ovals and her circles, knowing that the elastic property of the leaves will retain them in their position—making her nest of equal strength throughout, by the most rational adjustment of each distinct part—demands from us something more than mere wonder; for such an exercise of instinctive ingenuity at once directs our admiration to the great Contriver, who has so admirably proportioned her knowledge to her necessities.”

The only remedy that we can suggest in case these little bees should be disfiguring any of our bushes, is to catch and destroy them and thus prevent their further increase; it is possible that the application of diluted hellebore may prevent their touching the leaves, at any rate it is worth a trial.

The three following insects were fully treated of in the Report of the Entomological Society for 1870 where our readers will find their history set forth in detail, we therefore only briefly allude to them now.

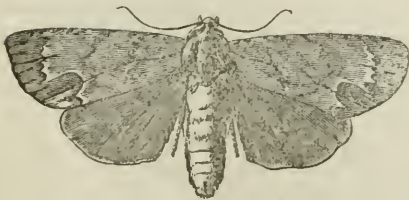
Fig. 23.



Our active little enemy the Plum curculio *Conotrachelus nemophar*, Herbst, (Fig. 23) has not been quite so plentiful this past season, although in some sections of the country the complaints are as strong as ever against the annoyance of fighting perpetually this troublesome little Turk. The figure well represents the different stages of the insect, the hair lines at the sides shewing the true length.

(a) Gives the larva or grub which is hatched from the egg deposited by the mother beetle in the plum; (b), is the pupa or chrysalis, the intermediate state in which the larva matures into; (c), the perfect beetle which to an ordinary observer may often be mistaken for a piece of chip or dirt as it has the faculty of feigning death, contracting all its limbs and remaining motionless for a considerable time; (d), shews the manner in which the insect performs its operation, first making a crescent shaped slit in the young green fruit, and then depositing an egg therein. We have heard of no fresh remedy, and believe that the old plan of jarring the trees, while a white cloth is spread on the ground beneath them, and then picking up and burning all the insects and fallen fruit, is still the easiest and most practical remedy.

Fig. 24.



Grey Dagger.

The Grey Dagger Moth *Acronycta Psi*, Linn., has this year been devastating the apple, and we have heard less of its damage to the plum orchards.

The moth (Fig. 24) is from one and a half to two inches in width and is of a general pale grey colour, with black markings on the fore wings, and from one of these peculiar marks which bears a strong resemblance to the Greek letter “Psi,” the insect derives its scientific name.

It should be destroyed wherever found—hand picking is the best remedy.



Fig. 25.

The Eye-spotted bud moth, *Grapholitha Oculana*, (Fig. 25) is the last on our list. This little leaf-rolling moth has been doing a good deal of mischief this year. Its small size enables it to work almost unnoticed and it is seldom detected before the damage is really done. The larva has the unfortunate propensity of selecting the young fruit buds for its food and by thus mutilating them it effectually prevents any fruit maturing. The fruit grower should keep a watchful eye over his buds and make frequent search to see that his trees are free from insects, “practice makes perfect,” and an attentive observer will soon learn to detect the parts that are attacked and to capture the enemy whether he be the large Sphinx worm or the tiny little caterpillar of the Bud Moth.

INSECTS INJURIOUS TO THE CURRANT AND GOOSEBERRY.

BY W. SAUNDERS, LONDON, ONTARIO.

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. The Imported Gooseberry Sawfly (<i>Nematus ventricosus</i>, Klug.) 2. The Native Gooseberry Sawfly (<i>Pristiphora grossularia</i>, Walsh.) 3. The Currant Geometer or Measuring Worm (<i>Ellopiæ (Abraxis) ribearia</i>, Fitch.) 4. The Spinous Currant Caterpillar (<i>Grapta prognæ</i>, Cram.) 5. The Green Measuring Worm of the Currant (<i>Angerona crocaturia</i>, Guenee.) 6. The Black Measuring Worm of the Currant (<i>Priocyclus armatarius</i>, Herr Sch.) | <ol style="list-style-type: none"> 7. The Pale Green Measuring Worm of the Currant (<i>Amphidasyus cognataria</i>, Guenee.) 8. The Oblique Banded Leaf-roller (<i>Lozotenia rosaceana</i>, Harris.) 9. The Four-striped Plant-bug (<i>Capsus (Phytocoris) quadrivittatus</i>, Say.) 10. The Imported Currant-Borer (<i>Ægeria tipuliformis</i>, Linn.) 11. The American Currant-Borer (<i>Psenocercus supernotatus</i>, Say.) 12. The Gooseberry Fruit Worm (<i>Penpelia grossulariæ</i>, Packard.) 13. The Gooseberry Midge (<i>Cecidomyia grossulariæ</i>, Fitch.) |
|--|---|

INSECTS INJURIOUS TO THE GOOSEBERRY AND CURRANT.

Within the past few years, the Gooseberry and Currant have suffered so much from the depredations of insects, that their culture has been much diminished, and by many parties entirely given up; with the idea that the crops will not pay for the trouble attending the keeping the bushes clear of these pests. It would indeed be a matter for regret, should this example be so far followed as to permanently limit much the production of these excellent fruits, so conducive to comfort and health; and we feel assured that with a little energy, and the use of proper means on the part of those engaged in their culture, the enemies to be contended with may be successfully kept under.

AFFECTING THE LEAVES.

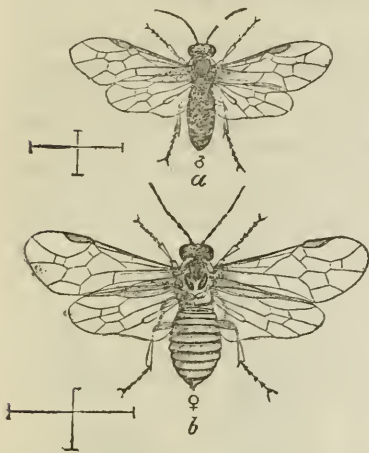
THE IMPORTED GOOSEBERRY SAW-FLY (*Nematus ventricosus*, Klug.)

The larva of this fly—known also as the currant worm—is perhaps the most troublesome of all the insects which the grower of these small fruits has to combat. It is not a native of this country but has been accidentally imported from Europe, where it has long been known. The fly was first described by a German entomologist named Klug, in a magazine published in Berlin, in 1819, but the larva or worm was not described till 1834: and at that time it was said to swarm on both currant and gooseberry bushes. With us it is a comparative stranger, it being only about 10 or 12 years since it first made its appearance in America. It seems to have been first noticed in the neighbourhood of Rochester, and has no doubt been brought over, probably in the chrysalis state, among gooseberry bushes, a large number of which are yearly imported from Europe. Mr. O. Bigelow, of New York, refers to it in the *American Agriculturist* in 1862, as being then first noticed in Onondago County, N. Y.; and in 1864 it was described by Prof. Winchell, of Ann Arbor, Michigan, as occurring there. It is quite probable that it may have been introduced at other points besides Rochester; in any case it has spread very rapidly, for it is found now all over the Eastern States, throughout Canada from Halifax to Windsor; and it has also overrun some of the Western States. In Europe

it does not appear to be so very troublesome as it is in this country; probably its natural enemies are more numerous there, and its increase is thus to some extent checked.

This insect usually passes the winter in the chrysalis, or inactive state, enclosed in a small papery looking, silken cocoon; sometimes at, and sometimes under the surface of the ground, and occasionally fastened on the stems of the currant or gooseberry bushes, on which it has been feeding, or in some convenient nook near by. Occasionally they pass the winter in the caterpillar state, a fact we were the first to notice; a full account of our observations on this point was published in the *Canadian Entomologist* vol. 2, p. 16 and 17 and 47 and 48 to which the reader is referred.

FIG. 26.



The perfect fly, see figure 26, appears very early in spring, the exact time depending much on the weather; when the season opens early they may be looked for about the third week in April—otherwise, not until near the end of that month or the beginning of May. During the past season we found them flying about actively on the 23rd of April, which was some time before the gooseberry or currant leaves had expanded. The two sexes differ considerably in appearance. In the figure, *a* represents the male, and *b* the female, both of which are drawn on an enlarged scale. The hair lines at the sides show their natural size. The male approaches very near in size to the common house-fly, but the body is hardly so robust, and the wings are more glossy. Its head is black, with dull yellow spots, with the horns, or antennæ, brownish black; the thorax, or anterior portion of the body is black, with a yellow spot at the base and in front of each of the fore wings; the abdomen, or hinder portion, is black above, but yellowish underneath and at the tip, and its legs are bright yellow; the wings are glossy, with black, or brownish black veins. The female is larger than the male, as may be seen by reference to the figure, and differs from it in the colour of the body, the female being mostly yellow instead of black. These flies are active only during the warmer parts of the day; at other times they are quiet, indeed almost torpid. In a few days they pair, and soon after the female is ready to deposit her eggs. These are laid on the under side of the leaves, and are generally placed there as soon as the leaves are sufficiently expanded to receive them. Most of the insects known as *saw-flies*, deposit their eggs in little slits, in the ribs or substance of the leaves on which their caterpillars feed. These they cut with a curious little saw-like instrument, which is enclosed in a sheath in the terminal segment of their bodies; but this species is furnished with only a sort of rudimentary saw, of which it appears to make no use, its eggs being laid upon the surface of the leaf, and usually in long rows upon the veins or ribs.

FIG. 27.



In the accompanying figure, 27, a gooseberry leaf is represented, with the larger veins or ribs partially covered with these eggs. In vol. 2, p. 15, of the *Canadian Entomologist*, we published some observations on this subject, which we cannot do better than reproduce here.

While turning up the branches of some gooseberry bushes, about the middle of May, we observed a number of whitish eggs on some of the leaves, arranged lengthwise in regular rows at short distances apart on the principal veins or ribs of the leaf. Usually they were placed singly in the rows, but here and there double. These were the eggs of the gooseberry or currant worm; they were about one-twentieth of an inch long, four times as long as broad, rounded at each end, and with a whitish glossy surface. On the branch then examined there were three leaves with these eggs on; two of them had their principal veins pretty well covered, while the third had but a few on it, as if this

had been the work of a single insect who had exhausted her stock before the third leaf was covered. On counting these we found there were 101 in all. Having just then caught one of the parent flies, a female who was hovering about as if looking for a suitable place on which to deposit her eggs, we squeezed some eggs out of her body, and comparing them with those on the leaf, found they were only about half the size, showing that the first must have grown considerably after being laid, and that they were probably nearly ready to hatch. In about three hours afterwards we observed that several of the young larvæ had come out of the eggs, and placing the leaf under a microscope, had the good fortune to see some of them escape. The egg consisted of a thin elastic membrane, sufficiently transparent to give a dim view of the enclosed larva. The black spot which is placed on each side of the head in this species served to determine the position the creature occupied. It was somewhat coiled up, and resting on its side, with its jaws against the side of the egg not far from its extremity. We could not perceive that it had any other means of rupturing the egg than by its mandibles which were working visibly within. In a short time the egg was ruptured, and the head of the larva protruded from the orifice. Withdrawing its two front feet from the egg, it seized the leaf on which it was placed, and by raising up its back and working from side to side, it soon worked itself out. The time occupied in the escape, from the first appearance of the head, varied from six to ten minutes,—for several of them were watched throughout the process. The egg was so thin and elastic that it yielded readily to the motions of the body, and adhered very closely to it, contracting and shrivelling up as the body was withdrawn.

The duration of the egg stage is probably from a week to ten or twelve days, depending on the weather. When the young larva comes out of the egg, it does not eat any portion of the empty shell, as is the case with many caterpillars, but sets to work at once to eat the leaf on which it has been placed. When first hatched, it is about one-twelfth of an inch long, with a large head, of a dull whitish colour, with a dark round spot on each side of it, and a few short hairs. The body, above and below, is whitish and semi-transparent, sometimes with a slight greenish tinge. At first they eat small holes in the leaf, as shown at 2 and 3, in figure 27. varying in size, and they feed in company, from 20 to 40, on a leaf; hence the leaf on which they are placed is soon completely riddled, all its soft parts being eaten out, and nothing but the skeleton framework remaining. Soon, however, they increase in size, and parting company, spread in all directions over the bush; and now they grow still more rapidly, first becoming green, then changing to green with many black dots, and finally reverting to plain green again, tinged with yellow at the extremities, just before the change to chrysalis takes place.

FIG. 23.



When from one-half to two-thirds grown, they are extremely voracious, and will, when numerous, often strip an entire bush in the course of two or three days. At this period of their growth they are well represented in fig. 28. During the short period of their caterpillar life, they outgrow their skin several times, which, when it becomes uncomfortably tight, is shed and replaced by an inner and looser one. When they attain full growth, they are fully three-quarters of an inch long, and when they undergo their last moult, or change, they appear, as before stated, in a plain green garb tinged with yellow. Their main business now is to look out for a suitable place in which to pass the chrysalis state, when they will remain for some time—usually from nine to twelve days in summer—in an inactive state, unable to defend themselves from enemies. Sometimes they fix on a spot among dry leaves or rubbish, on the surface of the ground; at other times

it is said they go under the ground; and again, we have often found their cocoons attached to the stems, and sometimes to the leaves of the bush on which they have been feeding. The locality having been fixed on, the larva begins to contract its length, and to spin a cocoon over itself, which, when finished, is nearly oval, smooth, of a brownish colour, and papery texture; and within this it changes to a small brown chrysalis, from which the fly escapes

late in June or early in July. Soon again eggs are deposited, from which another brood of worms are sent forth upon their destructive mission, which complete their growth before summer closes, and in most instances change to chrysalids before winter. With regard to their location during the winter months, Mr. G. J. Bowles of Quebec, communicates the following (see *Can. Ent.*, vol. 3, p. 9): 'I had occasion during October to remove two gooseberry bushes which had been infested with the saw-fly larva, and although I carefully examined the earth from their roots, I could not find any cocoons. About the same time I examined a dying plum tree which grew near, the bark of which was loose and full of holes, in which, as well as in the forks of the branches within three feet from the ground, I discovered many of them. From this it might be inferred that these larvæ do not *invariably* seek the earth before pupating in autumn, but sometimes follow the example of their predecessors, and construct their cocoons in a sheltered place above ground.'

Whether there are more than two broods during the season, we are unable to decide; certain it is, that there are not many weeks during the summer months when you cannot find the larvæ on the bushes in some stage of their growth. It is well known that the flies composing the separate broods do not all make their appearance at once; some are weeks later than others, and hence it follows that their progeny are considerably behind time as compared with the first comers; but whether this tardiness in maturing, on the part of some specimens, is sufficient to account for the continual presence of the larvæ during almost the entire season, from May to September, or whether there are more than two broods, is a question we cannot at present undertake to settle. Suffice it to say, that constant watchfulness is required by the cultivators of the gooseberry and currant, if they wish to preserve the foliage of their bushes from destruction by these foes.

These insects do not confine their attentions to the cultivated gooseberry, for we have repeatedly taken them on the wild gooseberry bushes in the woods. We have also, in one instance, found them feeding on the leaves of the black currant, and also on those of the plum. (See *Can. Ent.*, vol. 2, p. 147.)

With regard to their spread in Canada, it is not more than three or four years since their ravages first attracted much general attention in Ontario; but within that period they have increased to an enormous extent, so that there is now scarcely a farm or garden anywhere free from them. In the sister provinces, too, they are making rapid headway. Mr. G. J. Bowles, of the City of Quebec, in the *Can. Ent.*, vol. 3 p. 8, says, "they have become very troublesome there in some gardens, while others are (or were last year) still exempt." Mr. J. M. Jones, of Halifax, Nova Scotia, notes their appearance in that locality during the past summer, and if these extreme points have been reached, there is little doubt but that the intervening country is also occupied. In the United States, its occurrence as far east as Boston is reported by Philip S. Sprague. It is also becoming troublesome in Illinois; and in Indianapolis, Indiana, it was found by J. W. Byrket, in June, 1870, and there is little doubt but that it is common enough in other States adjoining.

REMEDIES.

These may be divided into *natural* and *artificial*, the former of which will first claim our attention. There is scarcely an injurious insect but what has its one or more parasites, either internal, feasting and fattening on its victim, till it is gradually consumed and dies, or external, attacking with greater violence, and causing more sudden death; and fortunately our gooseberry saw-fly is not without its enemies in both these classes. As early as 1866, the late Mr. Benjamin D. Walsh, State Entomologist of Illinois, published in the *Practical Entomologist*, p. 120, some notes on a parasite which he had observed attacking this species. It was a small fly (*Brachypterus micropterus*, Say), indigenous to North America. Unfortunately this fly is rare, Mr. Walsh having taken only two specimens in the course of some years' collecting. It often happens however, that when an insect, previously rare, finds food abundant and suitable, it soon becomes plentiful from the facilities thus offered it for the propagation of its species; still there has not as yet been much help received from this friend. More recently, Mr. J. A. Lintner, of Albany, N. Y., has found a minute parasite attacking the eggs of this insect, and with him they were so abundant, that out of fifty eggs which he collected, he only found some four or five which hatched into currant-worms; all the others produced the little parasitic fly. We have not heard of this friend being found in any other locality as yet; but it is doubtless capable where it prevails, of rendering efficient aid.

In the *Canadian Entomologist*, vol. 2, p. 9. a third parasite is described by Mr. B. D. Walsh, under the name of *Hemiteles nemativorus*, which was reared from the cocoon of the saw-fly, by our esteemed friend the Rev. C. J. S. Bethune, of Port Hope, Ont. In his notes on its history he says, "On June 29th (1869) I observed, to my surprise, a saw-fly cocoon of *Nematus ventricosus* attached to a leaf high up on a gooseberry bush, instead of on or under the surface of the ground, as usual. Thinking that the unwonted situation might be the effect of a parasitic attack upon the larva, I brought the specimen in, and in a few days afterwards found that this parasite had emerged from it." Mr. Walsh remarks that this same species of *Hemiteles* has been found near Rock Island, Illinois, where at that time the gooseberry saw-fly had not reached; hence, in all probability, this is an indigenous insect, which has taken kindly to this pest, thus showing that a native parasite does sometimes acquire the habit of preying upon an imported insect, a fact of great practical importance as well as scientific interest. In July, 1870, we observed a small ichneumon fly at work on the gooseberry worm, and communicated the facts to the *Canadian Entomologist*, vol. 2, p. 146, as follows: On the 21st of July, at a quarter past seven in the evening, we were among the currant and gooseberry bushes, watching the manipulations of a few of those well-known foes, the larvæ of *Nematus ventricosus*. They were feeding away voraciously, when a disturber of their peace appeared among them, in the shape of a small black ichneumon fly, which fastened itself on the body of one of their number, and began to deposit its eggs, by means of a sharp ovipositor, dexterously thrust through the skin of its victim, whose jerks and writhings, while indicating a very uneasy state, failed to shake off the tormentor. The fly remained some time attached, and so intent was it upon fulfilling the instincts of its nature that a capture was made of both fly and larva, by the sudden movement of a pill-box; but while endeavouring to transfer them to a glass, so that their further operations might be better observed, the fly suddenly escaped and was seen no more. The larva also died before reaching maturity, so that the further history of the parasite could not at that time be elucidated. Possibly this may be the same insect as that last referred to.

FIG. 29.



The accompanying figure, 29, represents another insect friend, belonging to the *Heteroptera*, or true bug family, and known under the name of *Podisus placidus*, Uhler. It is represented much enlarged at *a* so as to show its markings more distinctly; the smaller outline figure below shows its natural size. We were the first to note the fact of this insect in its immature state preying on the saw-fly larvæ, and communicated our observations to the *Canadian Entomologist*, vol. 2, p. 15. About the middle of August, 1869, we first observed these friends at work on the worms. They were nearly round, about the size of a common lady-bird, having the head, thorax and legs black, and the abdomen red, with an elongated black spot in the centre, divided across by a whitish line. Approaching a caterpillar, they thrust their proboscis into it, and quietly suck its juices until it shrivels up and dies. With the view of testing the probable amount of good these friends were capable of accomplishing, we shut up two of them in a small box along with

a dozen nearly full grown caterpillars, and at the end of three days found that they had consumed them all. Also six in another box with one bug, and in this instance the rate of consumption was about the same, two larvæ a day for each of these little creatures. The second time we fed them they did not get through their work quite so quickly; possibly they may have over-fed themselves at first. We have since repeatedly met with this useful insect, on its friendly mission, but as yet its numbers are quite insufficient to act as a material check on the natural increase of the saw-fly.

While we are not disposed to undervalue the labours of these friendly insects, we must admit that thus far, their combined efforts have been sadly insufficient to stem the advancing tide of the invading hosts. As confirmative of this, we would cite the fact that, in 1870 we collected several hundreds of the full grown worms, from which we reared the flies, but we failed to find a single parasite among the lot. We hope, however, that in time they will increase sufficiently to afford material aid to the agriculturist; but in the meanwhile recourse must be had to artificial measures, so as to bring sudden destruction upon the foe. Fortunately a very simple and effective, as well as economical remedy, is at hand, in powdered hellebore mixed in proper proportion with water. This is the root of *Veratrum album*, a plant which is a native of the mountainous districts of Europe, growing abundantly in the Alps and

Pyrenees. It is also cultivated extensively in Germany. Its usual retail price in powder is from 30 to 40 cts. per lb., and an ounce is sufficient to mix with a pail-full of water, which, when mixing, to avoid its being lumpy, should first be stirred with a small quantity of water. The readiest way of applying it is with a watering-pot, showering the bushes well when it will be found to act promptly and effectually. The following "notes and experiments" which were published in the second volume of the *Canadian Entomologist*, p. 13, will serve to show what constant watchfulness is required to prevent these creatures from getting the upper hand of us, and also the value of hellebore as a remedy. The larvæ of the gooseberry saw-fly has been very abundant in the neighbourhood of London during the past season, 1869, and in our own garden it has been a continual fight as to who should have possession of the currant and gooseberry bushes, the worms or their rightful owner. During the early part of summer, anticipating their attacks, we were on the look-out for them, and by timely doses of hellebore, preserved the foliage with but little damage. About a fortnight later, having omitted inspection for a few days we were surprised to find the bushes being stripped again; and this time the enemy had got so far ahead as to damage their appearance considerably, but another prompt dosing of hellebore brought relief. After this we hardly ever found all the bushes entirely free from them. A walk around the garden would reveal a few here and a few there, and we were perpetually brushing off and hand-killing these smaller detachments. During the middle of August, being occupied with other matters, the garden was neglected for a few days when, on visiting it again, many of the bushes were found entirely leafless, and the foliage remaining on the others rapidly disappearing. Feeling discouraged, we began to have some misgiving as to whether the hellebore was, after all, such an unfailing panacea for this pest as we had supposed, and resolved to test the matter by careful experiment; so having mixed about 1½ ounces of the powder with a pail full of water, we were ready to proceed. Selecting a leaf each from two bushes, we marked them, and counted the number of their inhabitants, and found that one was occupied by *forty-four* larvæ of different sizes, crowding it above and below, while the other had twelve on it, all nearly full grown. Having transferred the mixture of hellebore and water to a watering-can, the bushes were sprinkled with it. In three-quarters of an hour we returned to examine the results, and found that the leaf which at first had forty-four on it, had now only two, and these were so far exhausted that they were unable to eat, and could scarcely crawl; while on the other leaf, out of the twelve there remained three, but in the same enfeebled condition. All around under the bushes the ground was strewn with the fallen foe; and we felt perfectly satisfied that entire reliance might be placed on this means of defence. We did not anticipate such speedy action on the part of the hellebore, or we should have returned to the examination sooner; the bushes were so entirely cleared that, excepting on one which had been reserved for another experiment, there was no occasion for repeating the dose.

There was one thing here that appeared remarkable, the portion of leaf on which the greatest number were feeding, appeared to be about the same size as before the hellebore was applied, or if smaller the diminution was scarcely perceptible. When the leaves which have been sprinkled with the liquid, dry, a very thin coating of the powder more or less regular, is found over them, and we had always supposed, that death resulted from eating a portion of the leaf thus coated. Such is undoubtedly the case, when the hellebore is applied dry, but in this instance, a meal, however small, made by *forty-four* caterpillars on half a leaf, must have materially diminished it; hence it is probable, that the death of most of these resulted from their imbibing or absorbing some of the liquid as soon as applied. Many of them showed symptoms of the violent cathartic action of the remedy, by their having a mass of soft exuvia, hanging to the extremity of their dead bodies.

The bush before mentioned, which had been reserved for other experiments was well stocked, and to this, attention was next turned. It sometimes happens, especially with those who live in the country, that hellebore is not at hand when the larvæ are first observed at work, and a few days' delay in procuring it is perhaps unavoidable. In such cases, the bushes may be entirely leafless before the remedy can be applied; and here hot water suggested itself as likely to be of some service as a temporary measure, and being also an article readily procured in every home. It is well known that many plants will bear such an application without injury, provided the heat is not too great; so taking some in a watering can a little hotter than one could bear the hand in, it was showered plentifully on the affected bush, and it was amusing to see how the caterpillars wriggled and twisted, and quickly letting go

their hold fell to the ground. After the excitement produced by the sudden heat was over they remained quiet for a time, as if wishing to "cool off," before commencing work again; some few did not recover from the application, but most of them were soon as active as ever. We would not suggest this remedy as a substitute for hellebore, but where this latter cannot be procured at once, the hot water may be temporarily used with advantage, and when once on the ground, the larvæ may have the life trodden out of them with the foot, or beaten out with the spade, or some other implement; in any case, many of them would never reach the bushes again, for when off their beaten track, enemies beset them on every side. It was interesting to see how busy a colony of ants were, which had a home at the base of a tree near by; lugging these large caterpillars along, a single one of which would take three or four of them to manage. The worms were twisting and writhing as if wondering whose hands they had got into, while the ants were hanging on with their sharp jaws, and slowly dragging their prey along; until by and by they had quite a little pile accumulated, which would no doubt furnish them or their progeny, with a feast of fat things for some time to come. Then there are the tiger beetles, (*Cicindelidæ*), and the *Carabs* large and small, with a host of others, ever running about, looking for stray objects of this sort on which to make a dainty meal.

It has been urged against hellebore that it is poisonous, and great outcries have been made against it on this account; chiefly by parties interested in the sale of other articles, and the public have been cautioned against using the fruit after such an application. It is quite true that the hellebore is poisonous when taken internally, in quantities; but if used in the manner we have indicated, no fear need be entertained of the slightest injury resulting from it. Examined immediately after a thorough sprinkling with the hellebore mixture, the quantity on any bunch of fruit will be found to be infinitesimal, and the first shower of rain would remove it all. If it be found necessary at any time to apply the mixture to bushes where the fruit is ripe, and just ready to be picked, it might then be washed in water before using, which would readily remove every trace of the powder. During the past ten years, many thousands of pounds of hellebore have been used in Europe and America, for the purpose of destroying this worm, and we know of no case on record where injury has resulted from its use.

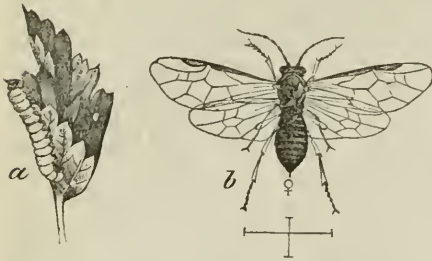
Carbolate of lime has also been recommended as a remedy for this insect pest. This is a dark-coloured powder, with a strong smell of coal tar, and seems to be very variable in its composition, as prepared by different manufacturers. While we are not prepared to reject all such preparations as worthless for this purpose, still, from the experience we have had in their use, we hold them in but little esteem, ranking them very far below hellebore in effectiveness and in economy also; for although the carbolates are sold at a less price per pound, it takes so much more to go over the same number of bushes that it is really far more costly than the hellebore. The following experiments which we made with carbolate of lime during the past summer will show what success we had with it:—On the 24th of May we found the saw-fly larvæ plentiful on some gooseberry bushes, so, selecting a bush to experiment on, we first sprinkled it well with water, then, having marked one of the branches we counted the number of larvæ on it, and found them to number thirty; this branch was then well dusted with the *carbolate*. It was now evening. The next morning we examined the branch, and found 24 on it still feeding. We then gave it a second dusting, and during the day twelve of their number fell to the ground, but they were still living and crawling about. We then gathered the remaining twelve, and placed them in a glass with the dusted leaves, but they all survived, and soon went into the chrysalis state. This powder being so variable in its composition, it is possible that some may succeed better with it than we have done. All we can say is, that we got the best we could find, and conducted the experiments fairly; the results speak for themselves. Our own view is, that while so safe, economical and speedy a remedy as hellebore is to be had, it is not worth while wasting time in applying preparations so much inferior.

Hand-picking.—This, although almost a hopeless task when the larvæ have attained to any size, and have scattered, may be very advantageously followed while they are young, and feeding in groups of from 20 to 40 on a leaf. An experienced eye will soon detect them, usually on the lower leaves on the bushes, the little holes they eat in the leaves serving as a ready means of discovering their location. Many a brood may thus be destroyed, and one has the satisfaction of knowing that when taken in this young state, the evil they would otherwise accomplish is "nipped in the bud."

No. 2. THE NATIVE GOOSEBERRY, OR CURRANT SAW-FLY. (*Pristiphora grossulariæ*, Walsh).

This insect, although not common in Canada, has been observed by Mr. G. J. Bowles, of Quebec, on his gooseberry bushes, and hence is worthy of mention. In figure 30

FIG. 30.



we give a representation of a female of this species, on a magnified scale—the hair line behind it showing the natural size—from which the reader will see that there is a close resemblance between the native saw-fly and the imported one. There are, however, differences which the skilled entomologist can readily detect, in the distribution of the veins on the wings, which locates it in a different family, *Pristiphora*; and moreover, a more palpable difference in the relative size of the insects, the native being but two-thirds the size of the imported species, in all its different stages. Mr. Benjamin D.

Walsh, who discovered this insect, gives in the *Practical Entomologist*, p. 123, some additional distinctive features. The larva of the native saw-fly is always green, and never bears the numerous black spots so characteristic of the imported species; neither does it ever go under ground to spin its cocoon, but constructs that cocoon among the twigs and leaves of the bush on which it feeds. The winged insect of the second brood comes out the same season, instead of remaining in the chrysalis state all winter, so that it cannot then lay its eggs upon the leaves, but must necessarily lay them upon the twigs of the infested plants. Otherwise, if it laid them upon the leaves in September, which is the month in which the fly of the second brood appears, the eggs would be scattered along with the leaves in their fall, far away from the infested bushes, and the young larvæ would starve when they hatched out the next spring, and the species become extinct. The very young larvæ do not gather in numbers upon one particular leaf, as in the imported species, but distribute themselves pretty evenly over the whole bush. The sexes also resemble each other very closely in the native insect, as remarked by Mr. Walsh in a second excellent paper on this saw-fly in the *American Entomologist*, vol. 2, p. 20.

The first brood of these larvæ may be looked for about the end of June, and the second during the latter part of August; and while they infest both the currant and gooseberry, they appear to show a decided preference for the latter. Their effects on the bushes, when numerous, are very similar to those of the imported insect, and, if necessary, they may be treated with the hellebore mixture with similar good results. From the reports of Messrs. Walsh and Riley, it would seem that they are common, and often troublesome, in the States of Illinois and New York.

No. 3. THE CURRANT GEOMETER OR MEASURING WORM. (*Ellopiæ* [*Ab. ravis*] *ribearia*, Fitch).

This is a very common insect in many portions of Canada, but has shown itself more destructive thus far in the eastern than in the western parts of our country. It may be readily distinguished from the saw-fly caterpillars by its peculiar mode of progression—for having its feet placed at each extremity, it arches its body into a sort of loop at every step, and is hence popularly called a measuring worm, or span worm.

Fig. 31.



Colours—(1 and 2) yellow, black and white; (3) Mahogany brown.

to the progress of this branch of fruit culture. In our own neighbourhood we had not met with it in any profusion until some three or four years since, when we found that in some gardens it had stripped the currant bushes quite bare, and since then its presence has become more general.

When full grown, this caterpillar measures from an inch to 1-1-10th inches in length. Its head is medium sized, white, bilobed, with a large round black spot on the upper part of each lobe, a short black stripe across the front, a little above the mouth, with a small spot of the same colour on each side of it. Its jaws also are black, and there are a few short black hairs scattered over its surface. The body above is whitish, with a number of black spots of different sizes on each ring or segment. There is a wide yellow stripe down the back, and another of the same character along each side, but somewhat broken. The under side is white, with a slight tinge of pink, and also spotted with black, with a wide yellow stripe down the middle. The feet are blackish, pro-legs yellow, dotted with black.

There is but one brood of this insect in a year, hence there is no probability of its ever becoming so formidable a pest as the imported saw-fly. It survives the winter in the egg state, on the twigs and limbs of the bushes, and remains in this condition until late in May, or when the bushes are in full leaf. Then the eggs are hatched, and, in about three or four weeks after, reach their full size. With us, they are usually full grown from the 20th to the 25th of June. They then descend to the ground and burrow a short distance under the surface, where their bodies become much shortened, and then soon change into dark brown chrysalids about half an inch long, in which state they usually remain from fourteen to twenty days, when the moth is liberated. The duration of the chrysalis state given is the result of observations on the insect in confinement. A considerable number of specimens which we reared entered the chrysalis state on the 23rd and 24th of June, and produced the moths from the 7th to the 12th of July.

Fig. 32.



Colour—Pale yellow, with dusky spots.

The moth, (see figure 32,) is of a pale yellowish colour, with several dusky spots, varying in size and form, and more prominent in some specimens than in others; sometimes they are so arranged as to form one or two irregular bands across the wings; These latter when expanded measure about $1\frac{1}{2}$ inches. Soon after the moths' escape they pair, and then the female deposits her eggs on the twigs and branches, where they endure the remaining heat of summer without hatching, and also the piercing cold of winter without being destroyed, awaiting the arrival of their proper time for hatching the following spring.

Mr. Walsh says that this insect has been a severe pest for a great number of years in some of the more eastern States, especially in New York and Pennsylvania. It is also common in some portions of Missouri. Mr. J. G. Bowles, of Quebec, says that he has found it common on the black currant, as well as on the red currant and gooseberry.

The same remedy which was recommended for the saw-fly larvæ, viz., hellebore, may be used with advantage here also, and in the same manner. Hand picking can be more easily followed out with this species than with some others. The habit the larva has of letting itself down from the bush with a silken thread and remaining suspended, may be turned to practical account as an aid to their capture; for, if after tapping the bush a forked stick or some similar instrument is passed under it, all the hanging threads may be caught, and the larvæ thus drawn out in groups and crushed with the foot. By repeating this operation frequently the bushes may in a short time be pretty well cleaned. We are not aware of any parasites having been found attacking this species.

NO. 4. THE SPINOUS CURRANT CATERPILLAR. (*Grapta progne*, Cram.)

Dr. Asa Fitch, State Entomologist of New York, first refers to this insect as attacking the currant, in his third report. For several years past we have taken it on both the gooseberry and currant, and also on the wild gooseberry bushes. Mr. Bowles has also found it in Quebec, feeding on red currant; and in the recent report on the noxious insects of Illinois, by Dr. W. Le Baron, State Entomologist, it is mentioned as being troublesome there, and in one section had done considerable mischief by stripping the leaves from the currant bushes. Although the insect is very widely distributed on this continent, we do not apprehend that it will ever cause any very serious trouble; still it is well that all should be familiar with its history, so that, should it increase unexpectedly, our readers may be enabled to recognise it.

FIG. 33.



The perfect insect is a butterfly, and a very handsome one too. It is represented in fig. 33: The pair of wings which are attached to the body show the markings of the upper surface, and the detached pair those of the under surface. Its fore wings are dull reddish orange, with the outer edge widely bordered with dark brown, and within there are many spots of brown and black. The hind wings are dark brown, tinged with red behind, shading into reddish towards the front. The under surface of both wings is dark brownish, traversed by many greyish lines and streaks, and on the fore wings is a very wide band towards the

outer edge of a paler colour. The wings are very irregular in outline, with curious notches and prominences. This butterfly passes the winter in the perfect or winged state, hiding in some sheltered nook, where it remains torpid during the cold of winter, and awakes to life again with the genial warmth of spring. They may be found very early in the season, skipping about with their peculiar jerky flight about the openings in woods, basking now and then on the sunny side of a tree, or sipping the sweet juice exuding from a freshly cut stump. When its wings are spread it measures from $1\frac{1}{2}$ to $1\frac{3}{4}$ inches. There are probably two broods of this insect during the season. Mr. Bowles has taken the larva at Quebec full grown on the 28th of June, while we have taken them in the same stage from the 26th of July to early in August. It is likely that Mr. Bowles' specimens belonged to the first brood, and ours to the second. The colour of the caterpillar varies from light brownish to dull greenish yellow, with many longitudinal lines of black, whitish and yellow, more or less distinct. It is about an inch or a little more in length, and its body is thickly set with branching spines, varying in colour from yellow to orange and dark brown, many of the branches being tipped with black.

When full grown it seeks some secluded spot in which to change to chrysalis, sometimes the under side of a leaf, or twig is selected, and here after spinning on the surface a small web of silk, it hooks its hind legs in the fibres and suspends itself head downwards. In this state it remains for a day or two, gradually contracting in length, until finally the caterpillar skin is shed, revealing a rugged looking brown chrysalis, prettily ornamented with silvery spots. With regard to the duration of the chrysalis state, Dr. Harris places it at from eleven to sixteen days, while Dr. Le Baron has had them appear in seven days, very probably the heat of

the weather may have much to do with their development. The flight of the butterfly is very graceful, as it hovers over the tips of the branches of the currant and gooseberry bushes, where it places its eggs among the young and tender leaves. The eggs are generally placed singly, and it is not often that there are many on any one bush.

Should this insect ever become sufficiently numerous to require attention, it may be destroyed by hellebore or lessened in numbers by hand picking.

No. 5. THE GREEN MEASURING WORM OF THE CURRANT. (*Angerona crocota* Guenee.)

The moth from which this caterpillar is produced, is also very generally common, although seldom sufficiently abundant to be destructive. The currant is not the only food plant of the larvæ for it has been found also upon the strawberry, and probably feeds on other plants besides. This moth is a native of America, and may often be seen flying about the openings, on the edges of the forest, for it takes wing by day. It is not a robust flier, and hence is not difficult to capture. Its wings are yellow, see figure 34, varying in shade from deep to pale; with dusky spots and dots, sometimes few in number or altogether wanting, while in other specimens they are very numerous, the larger ones arranged, so as to form an imperfect band across the wings. The underside of the wings is usually a little deeper in colour than the upper. When expanded they measure from one and a quarter to one and a half inches, the specimen figured is rather under the average size. When in its native haunts,

FIG. 34.



the larvæ probably feeds on the wild currant, gooseberry, strawberry, and perhaps other plants as well, and the fact of its being so general a feeder will perhaps account for the little attention which has thus far been given to it.

This insect is a very prolific one; a female which we captured last year, late in June, deposited on the 27th of the month 220 eggs, which were laid in patches or clusters, on different parts of the box in which it was confined, each group containing from ten to forty or fifty. They were of an oval shape about 1-33rd of an inch long, and 1-50th wide. When first laid they were yellow, but in a day or two afterwards, they changed to a bright red, changing afterwards to greyish brown before hatching; they came out between the fourth and seventh of July, showing the duration of the egg stage to be from eight to eleven days. The young caterpillar just hatched, was about 1-10th of an inch long, with a large pale brown head, and a yellowish green body, with a dark brown stripe along each side, below which the body was paler with a whitish bloom over its surface, and a few short brownish hairs, which were most numerous on the terminal segment.

FIG. 35.



The accompanying figure 35, represents the larva a little more than two thirds grown, feeding on a gooseberry leaf. At this period it does not differ materially from the full grown larva, which has been so well described, along with the chrysalis by Mr. G. J. Bowles, in the *Canadian Entomologist*, vol. 2, p. 10, that we cannot do better than to quote his own words.

"Mature larva (Quebec).—Fed on red currant; length, 1.50 to 1.75 inches; body gradually increasing

in size from head to pro-legs; general colour, yellowish green.

"Head square, and flattened above, with three longitudinal purplish brown and whitish stripes, which are continued on first segment. There are also two small projections like rudimentary antennæ, one on each side of the head, .03 long.

"Body yellowish green, an indistinct whitish dorsal line, a rather broad whitish line on each side, just below the spiracles, bordered above with faint purple, which increases in depth of colour towards the posterior rings, and becomes a purple stripe on anal pro-legs, forming a resemblance to an inverted A. Beneath same colour as above, but with faint interrupted longitudinal lines; spiracles white, bordered with purple; above, on each segment from second to seventh inclusive, are five minute black dots (four in a square, and one in front towards the head) and all the rings have a yellowish band on the swelled part, where the succeeding segment is inserted; legs pale green.

"The pupa is .50 to .60 inch in length, and of a dark, olive-green colour, with the exception of the abdomen, which is pale greenish yellow, and has a row of black dots on each side, and another dorsal row. The wing-cases are very prominent, and from their strong contrast with the abdomen in colour, make the chrysalis a pretty object. I found them fastened by the tail, and reposing in a slight net-work of silken threads, with which the caterpillar had drawn the edges of a currant-leaf half way together, so as to form a kind of cradle. The structure could not be called a cocoon,—in fact, the chrysalis, which was very lively, had wriggled itself out of its bed in some cases, and hung outside, fastened only by the tail; the moth appeared in from 10 to 14 days afterwards."

The remedies already referred to will apply to this insect also, should it become at any time sufficiently numerous to cause alarm.

No. 6. THE BLACK MEASURING WORM OF THE CURRANT. (*Priocycla armatoria*, Herr Sch.)

On the 15th of July, 1870, we found some nearly black geometric larvæ feeding on currant and gooseberry bushes, which afterwards proved to belong to this species. They fed on the foliage of the black currant, as well as that of the red, and in fact seemed to prefer it. When first taken they were about half an inch long, with the body tapering a little towards the head, thicker along the middle and hinder portions; the head was small, and of a brownish black colour, spotted and streaked with white. The body above was dark brown, nearly black, dotted and marked with bright pale yellow; on each segment or ring from the fourth to the last, was a whitish, crescent-shaped spot on the back, most distinct on the fifth, sixth and seventh segments; these, with the eighth segment, were all enlarged at the sides and projecting, while the spaces between them were unaltered; the sixth and seventh segments bulged out more than the others. On the sides of the eighth, ninth and tenth segments, was placed a patch of a bright yellow; there was also a row of raised dots along each side, those on the front and middle segments dark brown, while those on the posterior segments were tipped with yellow. The hinder segment had a fleshy hump, or prominence, composed of two round tubercles, with a patch of yellow on the outside of each; there were also a few short brownish hairs scattered over the surface of the body. The under-side was blackish brown, the feet and pro-legs of a similar hue, the anterior pair of pro-legs having a stripe of yellow on the outside. Before maturing, this caterpillar attained a length of three-fourths of an inch or more, but retained the same markings, excepting on the head, which became pale brown, dotted with black. The larva entered the chrysalis state early in the fall. It constructed a slight web, composed of silk, interwoven with portions of leaf and fraas, and stretched across the corner of a wooden box in which it was confined, and within this the change was effected. One specimen produced the moth on the first of June following, the other on the eighth of the same month.

FIG. 36.



In figure 36 we have a representation of the moth, which is a little below the average size. The colour of its wings is yellowish brown, shaded with purplish, especially on the hind wings; the streaks and dots are of a deeper shade of brown; the under surface is of a deep yellow, dotted with reddish brown, and with a line of the same colour crossing the wings, a little beyond the middle; behind this line, on the posterior wings, the colour becomes pale purplish brown.

While this insect may be ranked among those that are injurious to the fruit-grower, inasmuch as it is destructive to the gooseberry and currant, still it is comparatively rare, and has not thus far, at any time, presented itself in such numbers as to attract much attention from those interested in this department of industry.

No. 7. THE PALE GREEN MEASURING WORM OF THE CURRANT. (*Amphidasys cognataria*, Guenee.)

Mr. G. J. Bowles, of Quebec, was the first to notice this insect as injurious to the currant. In a communication to the *Can. Ent.*, vol. 2, p. 11, he says: "On the 3rd of August my attention was drawn to a small black currant bush, by its peculiar appearance.

On a closer examination, I found a number of geometric caterpillars, which were resting themselves in their customary manner, by clinging to the branches with their anal legs, and holding their bodies extended. At a little distance they closely resembled the bare stalks of leaves, and it was this resemblance which led me to seek the cause of the bush being affected in such a manner. I gathered twenty-four of these caterpillars, which were all nearly full grown, and fed them on black currant leaves in a box of earth; but by the 7th of August they had all descended and changed to pupæ, on or just beneath the surface of the ground, without forming any cocoon. The following is a description of this larva:

"Mature larva, fed on black currant—length, $1\frac{3}{4}$ to 2 inches, nearly cylindrical, gradually enlarging to the posterior extremity; general colour, pea green.

"Head, greyish green; body, pale green, with a darker green interrupted dorsal line, and indistinct broken transverse lines of the same colour; a yellow cross line on posterior end of each segment, and two small tubercles on second segment close to head. The body is also dotted with very small whitish tubercles, and a few short black hairs; spiracles reddish; feet, pale green. Some of the largest of these larvæ had a small brown tubercle on each side, in front of each spiracle on segment before the first pair of pro-legs, and a purplish brown ridge on last segment from one spiracle to the other.

"The chrysalis is from 6-10ths to 7-10ths of an inch long, very stout, and of a dark brown colour, with a strong point or thorn at the end of the abdomen, which is slightly flexible.

"These pupæ remained in the earth till early spring, when I became impatient, and brought a few in a small box into a warm room, hoping to hasten their development. On the 2nd of April I was rewarded by finding in the box a very fine female specimen of that handsome grey geometer (*Amphidasys cognataria*, Guenee), which had escaped from one of the chrysalids."

"The moth measures, when its wings are expanded, from 2 to $2\frac{1}{4}$ inches. Both fore and hind wings are grey, dotted and streaked with black, and with a wavy black line or light band crossing the wings a little beyond the middle; the body is also grey, dotted with black. The under surface is similar to the upper, but a little paler." This moth occurs in our own neighbourhood, but we have never met with it on currant bushes. We had always thought that it fed on pine, as we had several times taken it about pine woods; indeed we have an impression that we once bred it from pine, but did not take any record of it; hence we do not feel quite sure about it. Should it so turn out that the same larva feeds on such widely different food as pine and black currant, it would be a very interesting fact.

No. 8. THE OBLIQUE BANDED LEAF ROLLER. (*Lozotenia rosaceana*, Harris.)

This insect, which was described in the last year's report, by Mr. E. B. Reed, as injurious to the plum, we have found troublesome to the gooseberry and currant also; in fact it is a very general feeder, attacking the apple, pear, cherry, raspberry and strawberry as well, and probably other plants besides. It belongs to the family of moths called leaf-rollers, from the habit the larvæ have of rolling up the leaves or portions of them, thus constructing a rude case in which they live, and where they are partially protected from birds and other enemies.

FIG. 37.



The caterpillar is three-quarters of an inch long or more, of a yellowish green colour, with a pale brown head and a few fine whitish hairs scattered over its surface, arising from very small, slightly elevated shining tubercles or dots, scarcely visible without a magnifying glass. It changes to a dark brown chrysalis, usually within the case in which it feeds, and works its way partly out before the moth escapes. In the annexed figure, 37, the caterpillar is shown a little enlarged, while the brown chrysalis is placed underneath from which the moth has escaped.

The moth, see figure 38, measures, when its wings are spread, from three-quarters of an inch to an inch. Its fore wings are of a light cinnamon brown colour, crossed with bands and lines of a darker shade. The hind wings are pale yellow. For a fuller description

FIG. 33.



the reader is referred to the paper already spoken of by Mr. Reed. in the report of last year.

Doubtless this insect would soon become very much more numerous and destructive than it is were it not kept in check by parasites which prey upon it in the larva state. We have repeatedly reared small ichneumon flies from the caterpillars of this moth, and hope by another year to be able to give some interesting details regarding their history.

Besides the moths already referred to we have found another species of geometer, and another leaf roller, the latter particularly destructive to the gooseberry, but we have not been able to work out their life history sufficiently full to present them in this report. We hope to give some information relating to these after we have watched them through another season.

No. 9. THE FOUR STRIPED PLANT BUG. (*Capsus* [*Phytocoris*] *quadrivittatus*, Say.)

In the first annual report on the noxious insects of the State of Illinois, recently published by the new State Entomologist, Dr. W. Le Baron, we find this insect referred to as injurious to the currant. We have also seen it on currant bushes here, but never in numbers sufficient to do much damage, but as we have it common enough with us, and have seen it almost entirely destroy patches of mint and other plants, we have no doubt that should it acquire a strong liking for the foliage of the currant, that it would soon make its presence apparent. It is a true bug, belonging to the order Heteroptera, and family of Capsidæ. We quote the following from Dr. Le Baron's excellent report:

"Upon going into my garden on the morning of the 7th of June, my attention was arrested by the blighted appearance of the leaves on some of the currant bushes. Upon examining them, they were found to be more or less densely sprinkled with little, dried, somewhat square or angulated spots, not much larger than pin-heads. Some of the leaves were completely withered, and a number of parsnips which had been left for seed were found still more severely affected, some whole branches and their leaves being as dead and brown as if they had been severed from the plant for a week. I examined the plants carefully, and could find no adequate cause for the mischief, and I was inclined to think either it was some kind of blight or that if any insects had been damaging them they had run their course and disappeared. I saw on most of the bushes a small number of the pretty black and yellow hemipterous insect whose name is placed at the head of this article, but they did not seem to be in sufficient numbers to account for the evil. I observed them, however, puncturing the leaves; and upon referring to the *American Entomologist*. I found, on page 246 of the first volume, a notice of these same insects having been sent to the editor, by Mr. M. B. Bateman, of Painsville, Ohio, with the statement that they were found injurious to the currant bushes, and various kinds of shrubs."

"This is an interesting insect, by adding another to the comparatively small list of noxious insects belonging to the order of Heteroptera. This list includes the chinch-bug (*Micropus leucopterus*), the brown squash-bug (*Coreus tristis*), the large grey plant-bug (*Brochimena annulata*) and the lined plant-bug (*Capsus linearis*.) The last species, also known as the tarnished plant-bug, is one of our most pernicious insects, and belongs to the same genus as that now under consideration. All these insects do their damage by puncturing the leaves or stems of the plants, and wilting them by the abstraction of their sap."

This insect is about three tenths of an inch long, yellow, with four black stripes on their wing covers. The females are furnished with a blackish ovipositor, which is concealed under the abdomen when not in use. The sexes are easily distinguished the females being known by their swollen abdomen, which when opened, according to the statements of Mr. Le Baron, are found to contain from 15 to 24 oblong subcylindrical flask-shaped eggs, pale, with white tips. How and where these eggs are deposited has not yet been ascertained. These insects are very active especially during the hotter parts of the day and instantly take to flight when alarmed. In the early morning when the air is chilly they may be easily captured by jarring or brushing them off into a pail or pan partly filled with water which will prevent them from rising again.

AFFECTING THE STEMS.

No. 10. THE IMPORTED CURRANT BORER. (*Aegeria tipuliformis*, Linn.)

This insect has for many years been a great impediment in the way of successful currant culture. In the larva state it burrows up and down the centre of the stems of the bushes making them so hollow and weak that they often break off with the weight of the foliage or by the action of the wind.

FIG. 39.



The parent of this destructive grub is a pretty little wasp-like moth, see figure 39, which when its wings are expanded measures about three quarters of an inch across. The body is of a bluish black colour, the abdomen being crossed by three narrow golden bands; while on the thorax, at the base of the wings are streaks of a similar colour. The wings are transparent, but veined and bordered with brownish black, with more or less of a coppery lustre. The bordering is much the widest on the front wings, which are also crossed with a band of the same colour beyond the middle. The antennæ or horns are brownish black, and the legs are of the same colour, streaked and dotted with golden yellow. The under surface of the wings is paler than the upper,

This currant borer is not a native insect, but has been introduced from Europe, where, it has long proved troublesome. The exact period of its importation into this country is unknown, but it must have occurred many years since as it is now very generally disseminated. The moth makes its appearance about the middle of June, when it may be found in the hot sunshine, darting about with a rapid flight, gathering the nectar of flowers or basking on the leaves, alternately expanding and closing its fan-like tail, or sporting actively about in search of suitable places for the deposit of its eggs. In the cooler portions of the day, it is quite sluggish and may then be often found resting on the under side of the leaves of the currant bushes, and so torpid as to be caught and destroyed with but little difficulty.

The female deposits her eggs singly, near the buds where in a few days they hatch into small larvæ which eat their way through the outer portions to the centre of the stem, and here all through the summer they burrow up and down, enlarging the channel as they grow older, and thus forming a hollow several inches in length, which so weakens the affected stems that they are very easily broken. When full grown this is a whitish fleshy grub, of a cylindrical form, with brown head and legs. Before entering the chrysalis state a passage is made nearly through the stem, leaving merely the thin outer skin unbroken, thus preparing the way for the escape of the moth. Within the cavity which has afforded secure shelter to the larva, the change to chrysalis is effected, and here it sleeps peacefully while the bleak wintry winds howl among the branches. Early in June the chrysalis wriggles itself forward, and pushing against the thin skin covering its place of retreat finally ruptures it, and then thrusts itself partly out of the opening. By carefully examining the bushes about this period they may often be found in this half protruded position, and after remaining but a comparatively short time in this state, the moth bursts the chrysalis and effects its escape.

Were it not that the larva has the instinct thus to prepare the way for the escape of the chrysalis, the insect would be a perpetual prisoner within the hollow of the stem; for the chrysalis has neither mouth nor limbs, and the moth no teeth or jaws, with which to work a passage through a hard substance, the mouth of the moth being simply a hollow, flexible tube, which it uses to thrust into flowers to extract their sweets; under the sure guidance of the Great Architect of the Universe, no such mishap is ever likely to occur.

Soon after the escape of the moths they pair, and then shortly the female begins to deposit her eggs, which require the remainder of the season to develop, as already detailed; hence there is only one brood during the year.

In Harris' "Insects Injurious to Vegetation," published in Boston, Mass., in 1852 this insect is referred to as very common in the Eastern States. Dr. Fitch, State Entomologist for New York, also refers to it in his third report. In the *American Entomologist*, vol. 1, p. 79, reference is made to it as common in many parts of the Western States, and in the *Canadian Entomologist*, vol. 3, p. 9, Mr. G. J. Bowles, of Quebec, refers to the damage done to his currant-bushes by this same insect pest. Throughout the western portions of Ontario, the imported currant borer is very numerous and destructive, and while with us it chiefly infests the red currant bushes, it is not confined to them, but attacks the black currant also, and occa-

sionally the gooseberry. Where the perforated stems do not break off, indications of the presence of the borers may often be found in the sickly look of the leaves, and inferior size of the fruit; sometimes, indeed, so badly affected are they, that both fruit and leaves wither and die.

To lessen their numbers and check their increase, efforts should be made to destroy as many of the moths as possible in their season, and when pruning the bushes in the spring, all canes found to be hollow should be cut out and burnt. Dr. Fitch, in his third report, says on this point, "The utter carelessness with which the currant is treated in most of our gardens, with a thicket of young shoots annually left unpruned, and crowding upon and smothering each other, gives these borers and other pernicious insects the utmost facilities for working unmolested, and pursuing their devastating work without interruption. Were this shrub suitably trimmed and kept thinned out to only three or four stalks from each root, these stalks, growing freely exposed to the light and air, would be little infested by these depredating insects."

No. 11. THE AMERICAN CURRANT BORER. (*Psenocerus supernotatus*, Say).

This species was first described by Thomas Say, one of the fathers of entomology in America, in a communication made to the Academy of Natural Sciences, Philadelphia, in 1823; he found it in Missouri. Although not abundant in Ontario, yet it is found occasionally, and is deserving of notice. In the larva state, this insect is similar in its habits to the preceding species, but may then be distinguished by its lesser size, and its being destitute of feet. In the perfect state it is a small brown beetle, whereas the last mentioned was a wasp-like moth. In the *Practical Entomologist*, p. 22 Mr. Walsh thus describes this pest: "The larva of this insect is a small, cylindrical, white, footless grub, with the head brown and the jaws black. It feeds upon the pith of the stalks, and therefore killing them; it passes its pupa state in the stalks, and in the latter part of May, or beginning of June, changes to a small, narrow, cylindrical, brownish beetle, darker behind the middle, with a whitish dot a little before the middle of each wing-case and a large, slightly oblique mark of the same colour just behind the middle; the horns, or antennæ, are slender, and nearly as long as the body."

Dr. Fitch referring to this insect in his third report says "In all our gardens numbers of the currant stalks perish every season. To such an extent does this mortality prevail that this fruit would soon disappear from our country were it not that the roots of this shrub are so vigorous sending up a multitude of new shoots every year whereby the places of those that perish are constantly re-supplied."

"After the leaves have fallen in the autumn and during the winter, these dead stalks are readily distinguished from the live ones by being dotted over with a pretty little fungus the size of a pin head, and of a pale bright red colour and corky texture."

This beetle is a day flying insect also, but much less active and hence more easily captured than the preceding species. It may be found in its season on flowers, and the method already recommended of cutting out and burning the infested canes may be adopted in this instance also with great advantage.

AFFECTING THE FRUIT.

No. 12. THE GOOSEBERRY FRUIT WORM. (*Pempelia grossulariæ*, Packard.)

The first notice of this insect as a species injurious to the gooseberry was given by Dr. Fitch in his third report in which he calls the larva, "the caterpillar of the gooseberry moth." He had not, however, raised it to the perfect state and knew nothing of the appearance of the moth or of its habits. We may safely claim the credit ourselves of being the first to work out its history which we did in 1865; and it was from some of the specimens then reared that Dr. Packard's description and figure given in his work were taken, see *Packard's Guide to the Study of Insects*, p. 321

FIG. 40.



The accompanying figure 40 well represents the moth with the cocoon along side of it. The fore wings are pale gray with dark streaks and bands. There is a transverse diffuse band a short distance from the base of the wing enclosing an irregular whitish line which terminates before reaching the front edge of the wing. Near the outer edge of the wing is another transverse band enclosing a

whitish zigzag line; there is also a row of blackish dots within the outer margin, the veins and their branches are white. The hind wings are paler and dusky. The head, antennæ, body and legs, are all pale grey, more silvery underneath than on the upper side. When its wings are expanded it measures nearly an inch across.

This insect spends the winter in the chrysalis state, enclosed in a brown, papery-looking cocoon (see figure 40 *a*), secreted amongst leaves or other rubbish, on the surface of the ground, and appears in the winged state during the latter part of April; soon afterwards they seek their mates, and the females are ready to deposit their eggs as soon as the fruit has well set. These are probably attached singly to the fruit, and here in a few days the young larva is hatched, when it begins at once to burrow its way into the berry, where it remains safely lodged. As this larva increases in size, it fastens several of the berries together by silken threads, now and then biting the stems off some of them so that they may be more readily drawn into any required position, and within this retreat revels on their substance at its leisure. This larva makes but one hole in a berry, and that but barely large enough to admit its body, and when disturbed, it displays great activity, wriggling and working its way backwards out of the fruit very quickly. and dropping part way or entirely to the ground by means of a silken thread. Out of the single hole in the berry its *fraus* is thrust, which sometimes accumulates in a little heap around the orifice.

When fully grown, the larva measures about three-fourths of an inch in length, with the body thickest in the middle, tapering slightly towards each extremity; the head is very small, pale brown, and horny-looking, with darker coloured jaws; the body is of a very pale shining green colour, with a slight yellowish tint, and semi-transparent; some specimens have a reddish hue. Behind the head is a pale brown horny-looking patch, very similar in appearance to the head. The under side is of the same colour as the upper, the feet pale brown, and the thick, fleshy pro-legs pale green. When ready for its change, which is usually from the 15th to the 18th of June, it lowers itself to the ground, and there spins its little silken cocoon amongst leaves or rubbish, as already stated, and remains there in this inactive state, in a small brown chrysalis within the cocoon, until the following spring; hence there is only one brood of this insect during the year.

The fruit infested by this larvæ soon indicates their presence by becoming discoloured; if sufficiently advanced it ripens prematurely, otherwise it soon becomes dull whitish, and withers.

We have found this pest attacking the currant also, both the red and white varieties; neither does the black currant entirely escape, although it is more rarely affected. In these instances the fruit is not large enough to contain the worm, so it draws the clusters together, and, fastening the berries to each other with silken threads, lives within the enclosure.

Remedies.—The most satisfactory way yet known for extirpating this insect is by hand-picking, and its habits are such that evidences of its presence are not difficult to detect. Any berries found discolouring prematurely should be carefully looked over, as this is the first indication of its workings, and as the larva slips out and falls to the ground very quickly, watchfulness is needed to prevent their escape in this way; follow them up and give them no quarter, for where neglected they soon increase to an alarming extent; we have several times seen upwards of half the crop destroyed by these enemies in a short time.

We have tried dusting the bushes with fresh air slacked lime about the time of the appearance of the moths, that is late in April, and we think with good results, the moths seem to avoid in great measure bushes so dusted, for all insects dislike such alkaline materials. This is a remedy easily got at, costs but little, and is easily applied; for these reasons it should be further tested as opportunity offers. We have reared a number of specimens of this insect, but thus far, have not found them attacked by any parasites. Mr. C. V. Riley, of St. Louis, in his "First Report," says that "if chickens are allowed to run amongst the bushes after the fruit has gone, they will materially assist in checking this pest by devouring such chrysalids as are within their reach."

No. 13. THE GOOSEBERRY MIDGE. (*Cecidomyia Grossulariæ*).

Dr. Asa Fitch, of New York, is the only Entomologist who has written on this insect as affecting the gooseberry; we have had no experience with it ourselves, but thinking it probable that some of our readers may have met with it, we give Dr. Fitch's remarks in his first report

on the "Noxious Insects of the State of New York," p. 176, for their information and guidance. "It is common to find upon the gooseberry bushes in our gardens, some of the young fruit of a prematurely ripe appearance, turning red and dropping to the ground. Some years much of the fruit is lost in this way. This premature ripening of the gooseberry is caused by insects puncturing and depositing their eggs in it. One of these appears to be a species of moth which I have not yet obtained in the perfect state." (Dr. Fitch here refers to *Pempelia grossulariæ*, the moth last described.) "The other is the larva of a midge, or a small two-winged fly, of the genus *Cecidomyia* and family TIPULIDÆ. On examining some of these affected gooseberries early in July, their pulp was found to be putrid, and infested with small maggots of a bright yellow colour and oval form, their bodies divided into segments by five impressed transverse lines, and their whole appearance being closely like the larva of the wheat midge found in the ears of wheat. These completed their transformations and gave out the winged flies in the latter part of the month of July.

"The gooseberry midge is scarcely a tenth of an inch in length to the tips of the closed wings. It is of a pale yellow colour, the thorax paler than the abdomen, and of a wax-yellow hue; eyes black; antennæ blackish, of twelve joints, separated by hyaline pedicels one-third as long as the joints, which are short, cylindrical, with rounded ends, their length scarcely more than double their breadth; legs straw yellow, faintly tinged with dusky towards their tips; wings hyaline, faintly tinged with dusky.

"It is probable that those flies which come out the latter part of July deposit a second crop of eggs in the gooseberries, or else resort to some other fruit of a similar nature, and that the larvæ which come from these eggs lie in the ground during the winter; for we do not perceive how, otherwise there can be flies in June to deposit their eggs in the young fruit.

"All fruit upon the gooseberry bushes which is found prematurely decaying and assuming a ripened appearance, and all which falls to the ground should be gathered and thrown into the fire, to destroy the worms which the berries contain. By attention to this measure the haunts of this insect in the garden can be easily broken up, whereas, if this step is neglected, the evil will be liable to continue year after year."

We have received from Mr. G. J. Bowles, of Quebec, a third enemy to the fruit of the currant; it is a small fly a species of *Trypetus*, whose larva lives within the berries. We hope by another season to be able to give the details of the history of this insect with an enlarged figure of the fly.

INSECTS AFFECTING THE WHEAT CROPS

BY THE REV. C. J. S. BETHUNE, M.A.

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. The Wheat Midge (<i>Cecidomyia tritici</i>, Kirby). 2. The Hessian Fly (<i>Cecidomyia destructor</i>, Say). 3. The Chinch Bug (<i>Micropus leucopterus</i>, Say). 4. The Grain Aphis (<i>Aphis avenæ</i>, Fabr.). | <ol style="list-style-type: none"> 5. The Joint Worm (<i>Isosoma hordei</i>, Harris). 6. The Angoumois Moth (<i>Butalis cerealella</i>, Oliv.). 7. The Army-Worm (<i>Leucania unipuncta</i>, Haworth). 8. The Wheat Wire-Worm (<i>Agriotes mancus</i>, Say). |
|---|--|

During the past two years, thanks to a merciful Providence, the wheat-crops of this Province—the great staple of the country's wealth—have been almost entirely free from the ravages of insects. In some localities, it is true, there have been complaints of loss occasioned by the depredations of the midge, or the Hessian fly; but these have been few in number, and limited in extent, and, regarding the country as a whole, have hardly affected the general harvest returns to any appreciable extent. This immunity, however, that we now congratulate ourselves upon, and which has no doubt been one great subject of the expressions of gratitude and thankfulness that were poured forth by the inhabitants of the land upon the recent day of General Thanksgiving,—this freedom from the attacks of insects has been of no long duration, though we earnestly hope and pray that it may not soon be brought to a termination. It requires but a very slight effort of memory to recall the days when the name of Midge was a word of horror and execration throughout the length and breadth of the land, and when the Hessian fly was regarded as one of the greatest obstacles to the country's prosperity. During a long series of years, hundreds of thousands—nay, millions—of dollars' worth of grain were annually destroyed in this Province by the armies of these insects that, in countless myriads, invaded our fair fields. Year by year, however, as their nature and habits became better understood,—as improved modes of cultivation were adopted,—as a more scientific rotation of crops became the rule instead of the exception among farmers,—as superior varieties of wheat, adapted to withstand their insect foes, were more widely distributed,—and as parasites and other destroyers of insects increased, our crops became more and more free from attack, until we this year hear of hardly a county or township where any serious damage has been inflicted.

Such being the state of things, it may be thought too late in the day for us to bring before the public any detailed account of these creatures, as they no longer attract the universal attention of the community, and that our time and labour might be more usefully spent in the description of other and more immediately pressing foes. This objection would undoubtedly be of much force had this series of Reports been issued in previous years during the height of the ravages of wheat insects, but as this is only our second year of publication, we have not hitherto had an opportunity of affording the public a condensed and available account of these creatures, and it does not appear to us advisable to wait for fresh invasions before suggesting some modes of defence. The reader will, moreover find elsewhere reports on the great scourges of the day—the Colorado beetle, the Currant saw-fly, the Cabbage butterfly, and other insects that have been special subjects of anxiety of late. Without further apology, then, we shall pass on to the consideration of some of the worst and most notable pests of the wheat grower in this Province.

1. THE WHEAT MIDGE —(*Cecidomyia tritici*, Kirby.)

DIPTERA—TIPULIDÆ.

It is a singular and noteworthy fact that nearly all the species of insects that have proved the greatest enemies to the products of our farms and gardens have come to us from the other side of the Atlantic, and that they have in no long time as far surpassed in number and power the kindred species of native insects as the white immigrants have the aboriginal Red Indians. This is especially exemplified in the instances of the Wheat Midge that we are now treating of, the Hessian fly (*C. destructor*, Fab.) the Currant Saw fly (*Nematus ventricosus*, Klug), the Onion fly (*Anthomyia ceparum*), the Oyster-shell Bark-louse (*Aspidiotus conchiformis*), the Meal-worm (*Tenebrio molitor*), the Cockroach, the Bee-moth, the Codling moth, the Cabbage Tinea, the Asparagus beetle, the Red Currant borer (*Aegeria tipuliformis*), the Grain Aphis, the Cheese maggot, the House fly, the Carpet and Clothes moths, the Larder beetle and numbers of others, the date of whose importation cannot always be definitely determined, though it is an established fact that they are not indigenous to this continent, but have been brought to our shores by commerce or immigration.

The Wheat Midge, with which we are now especially concerned, long known in Europe for its destructive power, was first observed on this side of the Atlantic in the year 1820, when it appeared in north-western Vermont; it is, however, probable that it arrived in this country some few years earlier, and was introduced at Montreal or Quebec in some wheat imported from Great Britain. (For a detailed account of its appearance in different years down to 1856, see *Hind's Essay* page 77-85.) For some years little notice was taken of the insect, as it was confined to a small locality and committed but little damage to the crops. But in 1828 it became so numerous and destructive as to cause considerable alarm in Lower Canada and the adjacent State of Vermont; and from that year onward it continued to increase and spread, till it gradually overran almost all the wheat producing regions of North America and became a frightful scourge to the whole community. We cannot better illustrate its powers of destruction and the enormous pecuniary loss it occasioned than by quoting at length the following account of its ravages from Dr. Fitch's admirable report upon the subject. (*Sixth New York Report*, 1865, page 10.)

"The year 1854, proved to be one of the most disastrous to the wheat crop over the whole country that had yet been experienced. It was devastated as it had never been before, except when the insect had newly arrived and in some localities it was even more destructive now than it had been then. When many of the wasted fields were still remaining in public view, at the August meeting of the American Institute, Mr. John Robinson pronounced this insect to be the most terrible pest ever encountered by wheat growers. In my own vicinity many of the fields were not harvested. As illustrating the personal losses sustained by our agricultural population from this scourge. I may here state that one of my neighbours had sowed fourteen acres with wheat, on lands in excellent condition for this crop. But at harvest time there was nothing to gather therefrom, save the yellow larvæ, of which a handful, or at least a palmful, might be obtained on slightly rubbing any one of the ears; and after toiling to feed and fatten the vermin he demurred against granting them the additional favour of a shelter within his barn. But for the midge, his land would have yielded at least fifteen bushels per acre, showing his loss from this pest that year to have been upwards of two hundred dollars, estimating wheat at its usual price. And this is only an ordinary case, every neighbourhood throughout the country abounding in similar instances among our common farmers, whilst on the larger farms, where fifty and a hundred acres or more are customarily sown to this grain, the individual losses have been greater in the same ratio.

"And when we attempt to reckon up the amount of damage sustained by the State of New York from this minute and seemingly powerless and insignificant insect, we almost distrust the evidence of statistics and figures, they present us with sums which appear so fabulous. The wheat crop of the State, notwithstanding the diminution it was receiving from the midge, amounted in 1850, according to the census of that year, to over thirteen millions of bushels. Now, if we suffer only one-third of this amount to have been wasted by the midge in 1854, estimating the wheat at \$2.15 per bushel, which was its average value in our markets during the autumn and early winter of that year, it presents us with over *nine million four hundred and three thousand dollars* as the loss sustained. But this amount, enormous

as it appears, is but an approach to the real loss, as we perceive when we recur to the facts that the crop on which this estimate is based was itself materially diminished by this insect,—that a much larger crop was sown in 1854 than in 1849–50, and that far more than a third of the crop was probably destroyed, since many fields were totally lost, and others scarcely repaid the expense of harvesting; whilst those from which anything that could be regarded as a fair crop was obtained were few indeed. Over large sections of the State it was reported that not a third or a fourth of an ordinary yield was received. The most authentic information, probably, that this subject is susceptible of, was obtained by the State Agricultural Society, which, in gathering the agricultural statistics of that year, inserted in its circular the query: “To what extent was the wheat crop in your vicinity injured by the midge?” The secretary informed me that, on getting together all the replies to this enquiry, and placing everything at the lowest figure, so as to be certain the estimate was within the truth, the wheat which this insect had that year destroyed in our State, at its then current market price, exceeded in value *fifteen millions of dollars!* This amount would be more than a third larger, if estimated at the price to which wheat afterwards rose that winter. Indeed, the more we examine this subject, the more we become impressed with the justness of the remark that “the loss or damage to our country, caused by this yellow mite, *it is hard to over-estimate.*” Such was the fearful damage wrought by this tiny insect in one year, and in the single State of New York. Two years later the loss in Canada alone was estimated to exceed two and a half millions of dollars. The following year (1857) it destroyed one-third of the entire wheat-crop of this Province, amounting to about *eight millions of bushels!* And so it continued to carry on its work of destruction, varying slightly from year to year, down even to 1868, when, as we related in an abstract of the crop returns for the season (*Canada Farmer*, 1869, page 96), “the ravages of the midge were something frightful to contemplate.” Since that time, however, a wonderful change has taken place; the midge has almost entirely disappeared; the cultivation of wheat has become once more the great work of our farmers, and the country at large is manifesting a vastly increased prosperity in every respect.

But let us turn now from the description of the devastations committed by this pest to some consideration of its appearance and habits.

In the month of June, when the air is so warm as to cause one to sit with open windows in the evening, or, as Dr. Fitch so well puts it when the white glories of the locust are beginning to fade and drop to the ground, when the first sparkling fire-fly is seen through the gloom, when the farmer turns to hoe for the first time his Indian corn, now peeping a few inches above the surface, then the tiny flies of the wheat-midge commence to come abroad. On such evenings, if they are in the neighbourhood at all, we generally find them in numbers about our study-lamp, and thickly scattered over our papers beneath. They may be at once recognized by their orange yellow bodies, presenting in this respect a striking difference from the host of minute creatures that accompany them to the lamp that lures them to destruction. Of course we do not say that all the tiny yellow bodied insects that one sees are wheat-midges, for there may be other species with the same characteristic; but all of this colour, taken about our lamp in June that we have examined with a powerful lens, have proved to belong to this destructive species.

FIG. 41.



FIG. 42.



These tiny little flies—they are not more than one-tenth of an inch long (Fig. 41, represents a highly magnified specimen, with the wings expanded; Fig. 42, with closed wings)—appear to come forth from the pupa state about sundown, on such evenings as we have just alluded to. Fields where wheat was grown during the preceding season are the winter quarters of the insect; there it remains in the earth as a motionless and, apparently, lifeless, larva till the warm weather completes the transformations to the winged state, and brings out the tiny fly in countless numbers. A little before the middle of June, 1868,—as we noticed in the *Canada Farmer* at the time—we received a lump of clay containing an enormous number of these orange-yellow larvæ

from Mr. Alex. Belch, proprietor of the *St. Mary's Argus*. The clay had been taken from a field in the township of Blanchford, in which midge-infested wheat had been grown during the previous year. This handful of earth produced for us a great quantity of specimens, both male and female, and gave us such an opportunity of studying the creature as is not always easy to obtain. As a general rule, though many variations are to be found, the female flies,—the sex usually met with,—have clear, glossy, rarely smoky wings, with two conspicuous leading veins running lengthwise through the middle of the wing, and a small cross vein near the base; their antennæ, which are about the same length as the body, are composed of twelve joints; the body is nearly one-tenth of an inch long, of a bright orange yellow colour, though sometimes paler, and with a darker tinge on the back. In addition to the colour of the body, the great characteristic of these insects is to be found in their remarkable antennæ. In the male they are double the length of the body, and very slender and delicate. They are composed of twenty-four round joints, separated from each other by a thin stem twice the length of the joint itself, around each joint is a single whorl of fine hairs; the whole antenna thus resembles a string of widely-parted minute beads. This sex of the insect is very rarely seen, remaining apparently near the spot where it issues from the pupa, and not frequenting the fresh crops of wheat. We were fortunate enough, however, to obtain a number of specimens from the lump of earth referred to above. The antennæ of the female, which at once distinguish it from the male, when regarded through a strong magnifying glass, consist of twelve instead of twenty-four joints; they are about the same length as the body, or only half the length of those of the male. Each joint is oblong, slightly narrowed in the middle, and surrounded by two whorls of hairs. The stems uniting them are only about one-fourth the length of the joints; the whole are thus very different from the corresponding organs of the other sex. We mentioned above that there are two conspicuous leading veins running lengthwise through the middle of the wing. These are all that would be apparent to a casual observer; but besides them there are two others, one close to the front margin or costa of the wing, the other near the middle, but so faint as only to be visible when regarded in a particular light. A cross veinlet, uniting the marginal vein to the conspicuous middle one (the post-costal) near the base, is only visible in dried specimens, and disappears if wet. (For a minute and detailed description of the appearance and structure of the insect, see Dr. Fitch's 6th *N. Y. Report*, pages 23-24).

The wheat-midge, in all its stages, is very sensitive to dryness and moisture. In a dry atmosphere it becomes sluggish and inactive, while dampness renders it full of life and activity. It is on this account that the female fly performs its work of depositing its eggs upon the wheat-heads, only during warm damp evenings, and hides itself as soon as the returning rays of the sun dry the air. "Upon damp cloudy days also the insect remains at its work as active as during the night; or if a tree be standing in the field, or a forest borders it upon one side, within the shade thus produced it continues its operations more or less during the day. And hence, as has often been noticed, those spots which are shaded by trees have been severely devastated, or even destroyed, when all the rest of the field was but little injured. Hence, also, wheat-fields upon low lands, in the valleys and upon the flats along rivers, are always more injured by the midge than those upon the more dry uplands and hills. This has been noticed everywhere; and where a field has low marshy spots within or adjoining it, the grain adjacent to such spots is very perceptibly injured, to a greater degree than it is elsewhere. As it is from the middle to the end of June that this fly is abroad, and actively engaged in depositing its eggs, if the weather at that time is extremely dry, the wheat crops of the year escape injury; whilst, on the other hand, if the last half of June is unusually wet, cloudy and showery, this grain will be severely devastated. From the close observation I have been giving this subject the past and present years, (1865) the one having a dry, the other a wet June, I do not doubt but that I am safe in stating the above as a general rule." (Fitch.)

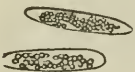


FIG. 43.

The eggs, figure 43, are deposited by the female midge in crevices of the wheat blossom, wherever a receptacle for them can be found; they are about the hundredth part of an inch in length and of a long oval shape; their colour is almost transparent with a slight tinge of golden yellowish red. In about a week there hatch out from them the tiny young larvæ—little footless maggots, quite transparent and colourless, at first, but afterwards becoming deep yellow or orange, figure 44. In shape they resemble the eggs from which



FIG. 44.

Figure 45 represents the larva highly magnified, with the first and last segments further enlarged.

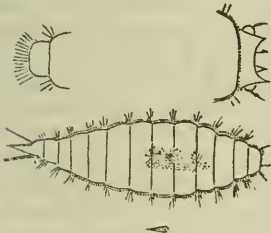


FIG. 45.

they have emerged, but are marked by rings or lines which divide them into the usual segments. As the eggs are laid in any convenient crevice of the wheat-flower or head, it is generally necessary for the young larva to wriggle itself down to the tender juicy grain from which it is to obtain its future support. The kernel, in consequence of the depredations thus made upon it, becomes shrivelled and abortive, and never becomes the fine plump grain that is the expectation of the farmer.

The dependence upon moisture continues as great in the larval state as in the perfect insect. During our examination of some specimens, upon one occasion, we took a few dry, motionless larvæ and laid them upon a piece of glass, where they remained perfectly still; then we dropped a little water upon them, and almost immediately they began to move about, crawling over the surface of the glass as long as the water surrounded them; after a time the drop evaporated, and very soon they became as stiff and motionless as before. This experiment we repeated several times, and always with the same result. Dr Fitch has also observed somewhat similar effects

and indeed, in one passage speaks of the larva as being amphibious in its nature. Though so fond of moisture the larva can yet live without it for an immense time; it will remain dry stiff and motionless for weeks and even months, and then, when rain comes, it absorbs the moisture and becomes active once more. "The wheat is for the most part nearly ripe and the ears and straw nearly juiceless and dry about the same time that the chief portion of the larvæ it has nurtured have become mature and ready to descend to the earth. But until a rain occurs to wet the straw and thus enable them to crawl down it to the ground, they are obliged to remain in their retreats within the ear. Thus multitudes of them ere they have the opportunity to make the descent, dry and shrink and become cased larvæ. When a rain at length comes on, saturating the wheat ears with moisture, these larvæ become active, and breaking out from their cases, descend to the ground, leaving these whitish cases or cast skins within the florets from which they respectively came."—Fitch.

In the ground, or in the ear—for a considerable proportion of the larvæ do not abandon the ear—the insect remains in its larval state all winter. Late in the following spring it assumes the pupa state for a short time, and then emerges as we have already described about the middle of June as a two winged fly—the parent of further generations of this pigmy but most formidable destroyer.

Having now given some account of the natural history of the wheat-midge, as well as a description of its ravages, we may advantageously turn our consideration to any modes there may be of counteracting its devastations. The "remedies"—to use a generally current expression—are two-fold, natural and artificial; that is to say, means provided by nature for keeping the number of individuals of the species within due bounds, and modes adopted by man, either direct or indirect, for accomplishing the same object or at least modifying its facilities of attack.

The *natural remedies*—unless our present immunity from the destroyer is occasioned by some unrecognized parasitic benefactor, as is by no means unlikely—are unhappily of but little avail in this country, though immensely serviceable in Europe. In England the ravages of this pest are so comparatively unimportant that the insect attracts but little general attention, though it has been long known to entomologists and farmers. The largest amount of wheat it has been known to destroy there in a single season, so far as we have been able to ascertain, was five per cent. of the whole crop. In the United States, on the other hand, and in Canada also, it has been reckoned to have frequently rendered worthless *fifty* per cent.—ten times as much as in the old country; sometimes even as much as *eighty* or *ninety* per cent. in a particular county. Such being the case, we are led at once to enquire why there should be this great difference in the destructive powers of the insect on the opposite sides of the Atlantic. Can it be the same species or is there anything in this climate that peculiarly favours its increase? There is no doubt that it is the same species, and, knowing its love of moisture as related above, there is not much doubt that the humid climate of England would be more favourable

than the dryness of this to its ready development. What then occasions the difference? We reply: *In England this midge has at least three parasites to keep it in check; HERE IT HAS NONE!*

Mr Kirby, one of the most eminent of British Entomologists during the earlier part of this century, has described three minute parasitic insects "which seem to have been ordained by the Author of the universe to limit the depredations of the wheat midge, and they so effectually execute their mission, that it has often happened, a year or two after the midges were in excess, not a specimen could be found." The most abundant, and therefore the most beneficial of these parasites is one named *Ichneumon Tipulæ*, Kirby. (It is now assigned to the genus *Platygaster*.) This insect is found upon grasses in June, and on wheat in July and August, when it runs over the ears and searches out those affected by the midges, depositing a single egg in each of the larvæ. This operation is thus described by Mr. Kirby: * "To see our little ichneumon deposit its egg in the caterpillar of the wheat-fly is a very entertaining sight. In order to enjoy this pleasure I placed a number of the latter upon a sheet of white paper at no great distance from each other, and then set an ichneumon down in the midst of them. She began immediately to march about, vibrating her antennæ very briskly. A larva was soon discovered upon which she fixed herself, the vibratory motion of her antennæ increasing to an intense degree; then bending her body obliquely under her breast she applied her anus to the larva, and during the insertion of her *aculeus* (sting-like ovipositor) and the depositing of the egg, her antennæ became perfectly still and motionless. Whilst this operation was performing the larva appeared to feel a momentary sensation of pain, for it gave a violent wriggle. When all was finished the little ichneumon marched off to seek for a second, which was obliged to undergo the same operation; and so on to as many as it could find in which no egg had been before deposited, for it commits only a single egg to each larva. I have seen it frequently mount one which had been pricked before, but it soon discovered its mistake and left it. The size of it is so near that of the *Tipula* (the midge) that I imagine the larva of the latter could not support more than one of the former, and therefore instinct directs it to deposit only a single egg in each; besides, by this means one ichneumon will destroy an infinite number of larvæ.

Mr. Kirby's second parasite is named *Inostenma inserens*; its larvæ destroy the eggs of the wheat-midge. The third, *Macroglènes penetrans*, he found inserting its ovipositor into the flowers of the wheat, and considered that its object was to lay its eggs in the midge larvæ. The same three parasites are found in abundance at the present time in France as well as in England; unhappily, however, they have not yet been observed on this side of the Atlantic.

It may not unnaturally be a source of wonder and enquiry why it is, if the midge was imported into this country from England—as it undoubtedly was—that its parasites have not come with it. The Hessian fly (to which we shall presently draw attention) is another imported insect, but it is almost exterminated by its parasites which have accompanied it—why should there be this remarkable difference between two such closely allied species of insects? The reason is that (see our articles on this subject, *Canada Farmer*, 1868, pp. 134 and 350,) their natural history is very different. The larvæ of the Hessian fly lie dormant in the depression they make in the straw for a considerable time, and are then liable to be carried wherever the straw is taken; its parasites live inside the larvæ and therefore they are just as liable to be carried about also. But in the case of the wheat-midge, a large number of the larvæ lie dormant for months in the dry wheat-heads and may then be carried anywhere, so long as the wheat is unthreshed, or if it is not thoroughly cleaned. The parasites on the other hand,—at least those belonging to the principal species (*Platygaster tipulæ*)—only attack the larvæ when they are exposed, crawling on the outside of the wheat-ears or down the straw to the ground. A considerable proportion of the larvæ descend into the ground to undergo their transformations, while some remain permanently in the ear. The latter escape the ichneumon's attacks, and are thus imported uninfected by the parasite; the former get largely stung in their passage to the ground, whence there is little probability of their being accidentally removed. Kirby's second parasite attacks the eggs in the flower of the wheat and so escapes importation; while as for the third, it is very doubtful whether it preys upon the wheat-midge or is parasitic upon one of the other parasites.

*Curtis' Farm Insects, Page 279.

We have often thought and have given expression to the opinion, that these ichneumonized larvæ might be imported into this country, in order to afford us a supply of defenders against the midge. The difficulties in the way are no doubt great, as the objects are so very minute and their capture at the proper time so uncertain; yet we feel sure that it could be accomplished if sufficient energy and skill were devoted to the task. So much were we impressed with the idea in 1868, that we corresponded on the subject with our esteemed friend, Mr. Frances Walker, F. L. S., of the British Museum (Entomological Department), London,—one of the principal English authorities on the order *Diptera*, to which the midge belongs. In reply, he remarked; “I doubt much whether the parasites of the wheat-midge can be introduced successfully into Canada. I can hardly attend to the matter this year, and I know only three Entomologists who are acquainted with the tribes of insects to which the parasites belong, and I have written to them on the matter. In many cases I think that insects are more kept in check by other means than by their parasites. *Platygaster tipule* is the chief parasite of the wheat-midge; the British species of *Platygaster* are very numerous; there are probably several species in Canada; and, perhaps, one of them may become a parasite of the wheat-midge. Besides the wheat-midge, there may be in Canada some species of *Cecidomyia* feeding on grapes, and each attacked by a species of *Platygaster*; the latter when it assumes the fly state, might be placed close to the wheat-midge, and perhaps in time it will take to it as its prey.” In regard to the latter suggestion we remarked at the time that although we have many species of *Cecidomyia* in this country, and most of them have their parasites, yet we did not think it likely that the parasite of one midge would take to another, except where it was entirely shut out from its own proper species, and that where both are exposed to its attacks, it would prefer the species natural to it rather than the other. The following year the ravages of the midge became so immensely diminished that we did not think it worth while to pursue the subject further. We are still, however, of opinion that, should our country be again visited by the pest, something might be done by the importation of parasites to lessen its devastations, and that at any rate the experiment is worth trying.

The only other natural remedy for this pernicious insect that we are aware of, is the beautiful yellow-bird, or goldfinch (*Chrysomitris tristis*, Linn.), that is so common throughout this Province. We have long regarded this sprightly creature as a special friend of the farmer, from its habit of devouring the seeds of thistles and other annoying weeds; but we learn from Dr. Fitch (*Sixth Report*, p. 79.) that it deserves additional commendation from its being also a destroyer of the wheat-midge. His account of its proceedings is well worth quoting:—“This bird causes that rough and ragged appearance of the wheat-heads which is the most conspicuous indication we have that the grain is infested by this insect. The bird alighting, grasps the wheat-stalk just below the ear, clinging fearlessly to it even when it is swayed to and fro by the wind, and with its bill it parts the chaff from the kernel, picking off and devouring the larvæ to which it thus gains access. When the larvæ are yet small, before the end of June, it begins to feed upon them, and if the wheat is badly infested, in a short time afterwards a large flock of these birds, both male and female, become collected upon it, and return to it day after day. The bird never attempts to obtain all the larvæ from the wheat-heads; it only opens those florets in which the larvæ are the most numerous, namely, the outer florets of the headlets, seldom, if ever, disturbing the inner florets. It parts the bearded chaff from the kernel of these outer florets, and devours the larvæ which are thus exposed, leaving the kernel in its place, sometimes with one or two larvæ remaining hid between the kernel and the inner chaff. Its operations seem to be of a most purely benevolent character, doing for man the best service in its power. Its aim appears to be to thin out and diminish these larvæ from the wheat-heads to such an extent, that part of the kernels—those which it leaves wholly untouched—will be able to fill and become good wheat. To obtain all the larvæ, it would be obliged to part the chaff from all the kernels, whereby no wheat whatever would be produced. Thus we are indebted to this bird that the grain which we do gather is not dwarfed and shrunk to a much greater degree than it is. And were the natural parasites of the midge introduced into this country, it is very evident that the additional aid which this bird would give to their work would subdue this insect here much more effectually and completely than it is subdued in Europe.”

Artificial Remedies.—Though we are so deficient in natural remedies for the devastation of the wheat-midge, there is no doubt that much can be and has been done by the farmers

themselves. These methods of reducing the insect's ravages are now so familiar to all our intelligent agriculturists, and are so simple in themselves, that we may be excused for dwelling but briefly upon them. (1.) Be careful to burn all the "screenings" of the wheat after it has passed through the fanning-mill; these, when the midge is prevalent, often contain thousands of the yellow larvæ, which will live through the winter, and produce flies for another crop, if not thus destroyed. (2.) Plough deeply in the fall any field that has been attacked by the midge during the previous summer, and take care to occupy it with some totally different crop during the following year. (3.) When the midge is in the neighbourhood sow only the improved "midge-proof" varieties of wheat. (4.) If spring wheat, sow as late as is consistent with safety, in order that the plant may not come into blossom until after the midge's period of active operations is over. (5.) If fall wheat, sow early, in order to anticipate the appearance of the midge. (6.) Avoid sowing wheat upon low, damp ground, as it especially favours the midge. (7.) Thoroughly prepare and cultivate your ground, in order that you may obtain as strong and healthy a growth as possible. After all this has been done, we may add (8), put your trust in Providence. As we may at any time be afflicted with another visitation of this scourge, though probably not for some few years now, remember—when it does threaten—that there is much truth in the old adage, "An ounce of prevention is worth a pound of cure!"

2. THE HESSIAN FLY (*Cecidomyia destructor*, Say).

DIPTERA—TIPULIDÆ.

As we have already remarked, when treating of the wheat-midge, the Hessian fly, together with a number of other most destructive insects, has come to us from the other side of the Atlantic. European entomologists have repeatedly maintained that it must be a native of America, as no such insect was observed amongst their wheat-fields during a long series of years; and Mr. Curtis has even gone so far as to call it "the *American* wheat-midge," in contradistinction to what he terms "the *British* wheat-midge" (*C. tritici*). It is now, however, generally admitted that it is of European origin, and it is almost certain that it was first brought to this continent in some straw used for the purpose of packing, by the Hessian troops, under Sir William Howe, during the American War of Independence. These soldiers landed on Staten Island, and on the west end of Long Island, in the year 1776, and in this neighbourhood the fly was first observed; hence it obtained its popular name of "Hessian Fly." Having multiplied in these places—as Dr. Harris relates—"the insects gradually spread over the southern parts of New York and Connecticut, and continued to proceed inland at the rate of fifteen or twenty miles a year. They reached Saratoga (two hundred miles from their original station) in 1789." Proceeding in this manner, the tiny pest gradually spread over the country, and has been found in almost every locality where wheat is grown. In the old world, also, its depredations have been sufficiently great to attract notice in England, France, Germany, Austria, Switzerland, Italy, Russia,—in fact in almost every country where this grain is cultivated to any extent. Our own Dominion, though frightfully devastated in subsequent years, was not invaded by the pest till about the year 1816, when it became prevalent in Lower Canada. It appears to have been first noticed in this Province in the year 1846. (For a detailed history of its progress in this country and the neighbouring States down to the year 1854, see Prof. Hind's Essay, pp. 42–46.)

So much has been said and written respecting the Hessian fly, and so many descriptions of it have appeared in agricultural and scientific publications, that we feel disinclined to attempt any new account of it or repeat once more "an oft told tale." As we have no new light to throw upon the subject, and, with the exception of some specimens received from Ancaster during the past summer, have had no opportunity for some years of investigating its habits, we shall not hesitate to make free use of the writings of others, especially those which are not likely to be accessible to the majority of our readers. In every case we shall, of course, make due acknowledgment of the source from which the information is derived.

The Hessian fly, though known for its destructive qualities for some time before, was first scientifically described by Mr. Say—one of most eminent of the early American Entomologists—under the name of the Destructive Midge (*Cecidomyia destructor*). "This

insect—Dr. Fitch relates—as a general rule, passes through two generations annually. The first of these occupies the autumn, winter and fore part of spring, and is reared at the roots of the young grain slightly under the ground. The second occupies the remainder of the spring and summer, and is nurtured in the lower joints of the straw. The time when its several changes occur, however, is not perfectly uniform, being varied by the climate, the state of the weather and perhaps other contingencies, and it is not improbable that individual specimens, placed in circumstances unfavourable to their development, in some instances have their growth so much retarded as to require even a whole year to complete their metamorphoses. In the ordinary course of nature, therefore, our crops of winter wheat are liable to two attacks of the Hessian fly, one generation reared at its roots producing another which occupies the lower joints of the stalks. Thus the larvæ and pupæ are present in it almost continually, from the time the tender young blades appear above the ground in autumn till the grain ripens and is harvested the next summer. Our spring wheat, on the other hand, can rear but one brood of these insects; they consequently resort to it but little if at all. Nor can the Hessian fly sustain itself except in districts where winter wheat is cultivated, in which to nestle during the autumn and winter.”

The eggs of the autumn generation are deposited by the female fly generally early in September, in the young fall wheat, in a crease of the leaf. Twenty or thirty eggs are laid on a single leaf, and these hatch out in about four days if the weather be warm. Mr. Tilghman, of Maryland, has published in *The Cultivator*, of May, 1841, the following minute and interesting account of the mode in which the eggs are laid: “By the second week of October, the first sown wheat being well up, and having generally put forth its second and third blades, I resorted to my field on a fine warm forenoon to endeavour to satisfy myself by ocular demonstration whether the fly did deposit the egg on the blades of the growing plant. Selecting a favourable spot to make my observation, I placed myself in a reclining position in a furrow, and had been on the watch but a minute or two before I discovered a number of small, black flies alighting and sitting on the wheat plants around me, and presently one settled on the ridged surface of a blade of a plant completely within my reach and distinct observation. She immediately began depositing her eggs in the longitudinal cavity between the little ridges of the blade. I could distinctly see the eggs ejected from a kind of tube or sting. After she had deposited eight or ten eggs, I easily caught her upon the blade and wrapped her up in a piece of paper. After that I continued my observations on the flies, caught several similarly occupied, and could see the eggs uniformly placed in the longitudinal cavities of the blades of the wheat, their appearance being that of minute reddish specks.” These eggs are computed to be about one-fiftieth part of an inch in length.

When hatched from the egg, the next proceedings of the insect are thus related by Mr. Herrick:—“The little wrinkled maggot or larva creeps out of its delicate membranous egg skin, crawls down the leaf, enters the sheath, and proceeds along the stalk usually as far as the next joint below. Here it fastens lengthwise, and head downwards, to the tender stalk, and lives upon the sap. It does not gnaw the stalk, nor does it enter the central cavity thereof; but as the larva increases in size it gradually becomes embedded in the substance of the stalk. After taking its station the larva moves no more, gradually loses its reddish colour and wrinkled appearance, becomes plump and torpid, is at first semi-translucent, and then more and more clouded, with internal white spots; and when near maturity the middle of the intestinal part is of a greenish colour. In five or six weeks (varying with the season) the larva begins to turn brown, and soon becomes of a bright chestnut colour, bearing some resemblance to a flax-seed.” Two or three larvæ, thus imbedded in a stalk, serve to weaken the plant and cause it to fall down, or to wither and die.

In this condition, the “flax-seed state,” as it is usually termed, the insect remains all winter. Regarding the structure and formation of this peculiar appearance there has been much controversy, into which we need not enter here. Suffice it to say, that some have held the opinion that the larva spins its cocoon which bears this form; others, that it is the hardened outer integument of the worm, separated from the insect, which remains within; others again, and notably, the late Mr. Walsh, that the pupal cocoon is exuded from the larva. Whatever may be the process, in this condition it remains till the warm days of spring arrive, when the insect completes its pupal state, and finally comes forth as a tiny two-winged fly. (Fig. 46.)

FIG. 46.



"The head, antennæ, and thorax of this fly are black; the hind body is tawny, more or less widely marked with black on each wing, and clothed with fine grayish hairs. The egg-tube of the female is rose-coloured; the wings are blackish, except at the base, where they are tawny, and very narrow,—they are fringed with short hairs, and are rounded at the tip; the legs are pale red or brownish, and the feet are black. The body measures about one-tenth of an inch in length, and the wings expand one-quarter of an inch or more. After death the hind body contracts and becomes almost entirely black." (Harris, *Injurious Insects*, p. 570.) The antennæ of the female are about half the length of the body; those of the male three-fourths. The former are composed of sixteen oval joints twice as long as thick, and clothed with a number of hairs; the latter have short, round joints, each with a chord of rather long hairs.

After these flies come forth from the pupa state in the spring they speedily set to work to lay their eggs on the leaves of the spring wheat, now appearing above the surface of the ground, as well as upon that sown the autumn before. From this batch of eggs another brood is soon hatched, the work of destruction goes on, and late in summer the second generation of flies comes forth. The larvæ of the summer brood are found almost always under the sheath of the leaf just above the first joint; their suction of the juices at that point weakens the stalk so much that a high wind very soon bends it down, and even breaks it off when the straw approaches ripeness. Of course the size and value of the grain is also immensely lessened by the absorption of the sap, which ought to go to filling out the ear. The winter brood attack the young plant lower down, and injure it at the root, frequently killing it outright.

Having now traced the life of the insect from the laying of the eggs in one autumn to the same point in the following year, we may turn our consideration to the remedies for the foe, which, as in the case of the wheat-midge above, may be classified as natural and artificial.

Natural Remedies. Though we are, unhappily, so very deficient in natural checks to the spread of the wheat-midge on this side of the Atlantic, our case is very different as regards the Hessian fly. It is preyed upon and devoured by a number of parasitic insects, whose combined attacks are computed to destroy nine-tenths of every generation of this pernicious foe. Mr. Say described one of the most useful of these parasites under the name of *Ceraphron destructor*. It is a shining black four-winged fly, about one-tenth of an inch in length. "In the month of June, when the maggot of the Hessian fly has taken the form of a flax-seed, the *Ceraphron* pierces it through the sheath of the leaf, and lays an egg in the minute hole thus made. From this egg is hatched a little maggot, which devours the pupa of the Hessian fly, and then changes to a chrysalis within the shell of the latter, through which it finally eats its way, after being transformed to a fly. This last change takes place both in the autumn and in the following spring. Two more parasites, discovered by Mr. Herrick, also destroy the Hessian fly, while it is in the flax-seed or pupa state." (Harris.) A fourth has been found by the same observer to attack the eggs of the enemy. "This egg parasite is a species of *Platygaster*. It is very abundant in the autumn, when it lays its own eggs, four or five together in a single egg of the Hessian fly. This, it appears, does not prevent the latter from hatching, but the maggot of the Hessian fly is unable to go through its transformations, and dies after taking the flax-seed form. Meanwhile its intestine foes are hatched, come to their growth, spin themselves little brownish cocoons within the skin of their victims, and in due time are changed to winged insects, and eat their way out." (Harris.)

It is owing almost entirely to these minute allies that our crops have been preserved to so great an extent, of late years, from the ravages of the Hessian fly. For a time the pest inflicted great damage, but its enemies soon increased and gathered strength, and have succeeded in keeping it within due bounds. Assuredly, we should feel deeply grateful to the merciful Creator, who has provided such effectual, though apparently insignificant, means to save the fruits of our fields from destruction.

Artificial Remedies. These are often attempted, but seldom with entirely satisfactory results. The best precaution to take—where the insect has shown itself in numbers, and where the wheat-midge is not apprehended—is to sow the next crop of fall wheat as late as can be done with safety in the autumn—about the middle or towards the end of September. This course prevents the parent flies from obtaining any young wheat upon which to lay their

eggs, and destroys the prospects of another generation. A fertile, thoroughly-cultivated, and well-drained soil is as effectual a means of escaping loss from the attack of this insect as any, probably, that can be mentioned. Benefit may also be derived from the sowing only of an approved flinty-stemmed variety of wheat, which is thus more capable of resisting the fly's attacks upon it. But after all the chief reliance for immunity is to be placed upon the labours of the parasitic insects mentioned above.

3. THE CHINCH BUG (*Micropus leucopterus*, Say).

HEMIPTERA—HETEROPTERA—LYGÆIDÆ.

The two species of insects that we have already described—the Wheat-midge and the Hessian fly—are undoubtedly the worst foes that the Canadian wheat growers have to contend against; but in the Western and Southern States the farmer has another pest that inflicts, if possible, even more injury upon his grain crops, of all descriptions, than these do in this country. The name of “Chinch Bug” has, in the west especially, as appalling a sound in the ears of the agriculturist as that of the “midge” has ever had amongst us. Happily, the creature is but little known in this Province, and, from its habits, is not likely ever to be so destructive here as in its own more congenial regions beyond the lakes; still it may obtain a foothold amongst us, and prove a source of evil, as it has already been observed in Ontario. It appears desirable then, that we should give some information respecting its nature and habits when describing the special enemies of the wheat plant.

As far as we have been able to ascertain, the Chinch Bug was first observed in the Province of Ontario in the autumn of 1866, by Mr. Johnson Pettit, of Grimsby—a most zealous and efficient Entomologist, whom we have often had to thank for valued and interesting specimens of rare insects; to whom, indeed, we owe many of the most highly prized specimens in our cabinet. In October of that year, Mr. Pettit sent us a number of specimens of the Chinch Bug that he had found hidden away for the winter under the bark of old logs, and thus afforded us an opportunity of giving the creature a minute inspection. Since that time we have not heard of its occurrence in any other part of the Province. That so little is known of it in this country ought to be, to us, a subject of sincere congratulation, especially when we read of its ravages elsewhere. Dr. Fitch has spoken of it as “unquestionably one of the most pernicious insects which we have in the United States; the locusts of Utah and California are the only creatures of this class which exist within the bounds of our national domain whose multiplication causes more sweeping destruction than does that of this diminutive and seemingly insignificant insect.”

In the United States, it was first noticed as long ago as the year 1783, at the close of the War of Independence, when it committed some ravages upon the wheat of North Carolina. It was then supposed to be identical with the Hessian fly, and for fifty years afterwards—possibly even to this day—it was supposed by the rural inhabitants of that State to have been left by the British soldiers as they passed through the country. For some years they continued excessively numerous in North Carolina, and destroyed the grain to such an extent that the sowing of wheat had to be abandoned for a considerable time. In 1831 the insect was scientifically described for the first time by Mr. Say, the great entomologist of the period, who captured a single specimen in Virginia. In 1839, and for some successive years, it was again numerous and destructive in the Carolinas and Virginia. About the same period, also, it was observed in the Valley of the Mississippi, and as far north as the State of Illinois, where it was known as the “Mormon Louse,” from the absurd supposition that it was introduced by these fanatics when they commenced their establishment at Nauvoo, in 1840. Since that time they have been a permanent plague to the farmer in the west, appearing every few years in perfectly incredible numbers, and sweeping everything before them almost as completely as a swarm of locusts. The following vigorous and unvarnished account of their proceedings, by an Illinois farmer (it is only one out of many that we might quote), will convey to the reader some idea of the havoc they create:—

“There never was a better ‘show’ for wheat and barley than we had here the 10th of June, and no more paltry crop has been harvested since we were a town. Many farmers did not get their seed. In passing by a field of barley where the chinch bugs had been at work for a week, I found them moving in solid column across the road to a corn field on the opposite side, in such numbers that I felt almost afraid to ride my horse among them. The road and fences were alive with them. Some teams were at work mending the road at this spot, and the bugs covered men, horses and scrapers till they were forced to quit work for the day.

The bugs took ten acres of that corn clean to the ground, before its hardening stalks—being too much for their tools—checked their progress. Another lot of them came from a wheat-field adjoining my farm into a piece of corn, stopping now and then for a bite, but not long. Then they crossed a meadow 30 rods into a 16-acre lot of sorgo, and swept it like a fire, though the cane was then scarce in tassel. From wheat to sorgo was at least sixty rods. Their march was governed by no discoverable law, except that they were infernally hungry, and went where there was most to eat. *Helping a neighbour harvest* one of the few fortunate fields, early sown—and so lucky!—we found them moving across his premises in such numbers that they bid fair to drive out the family. House, crib, stable, well-curb, trees, garden-fences—one *creeping* mass of stinking life. In the house as well as outside, like the lice of Egypt, they were everywhere; but in a single day they were gone.”*

The Chinch-Bug—for it is now time for us to give some description of the creature's appearance—is, in its perfect state, a tiny black insect about three-twentieths of an inch in length, with the wings and wing-cases white, the latter having a conspicuous black spot near the termination of each. The accompanying illustration (Fig. 47), represents on the left

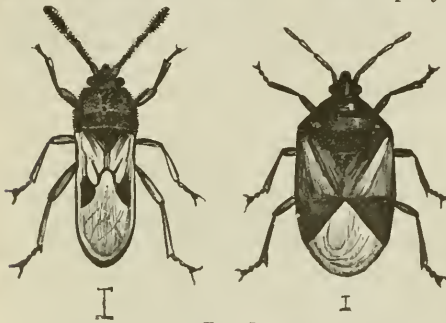


FIG. 47.

hand side a highly magnified specimen of the Chinch Bug; and on the right an ordinary bug. The lines at the bottom show the natural size. Like all true bugs (*Hemiptera*), it is provided with a sucker or beak though which it imbibes the juices of the plants on which it feeds. In the autumn it goes into winter quarters, sheltering itself from the severity of the weather under the bark of trees and logs, and in other protected situations. In the spring, when the grain has commenced to grow, it issues forth from its hiding place, and proceeding to the fields lays its eggs on the roots of the tender grain, wherever it can gain access to them. These eggs soon hatch and produce another brood, which, in their larval state, are at first red, and then as they increase in size become gradually darker, changing from brown to dull black, and in all cases with a white band across the middle of the body. After a time they attain their full size, acquire wings, and proceed to provide for the continuance of the species. In the Western States the bug appears to have at least two broods in the year, and in the South even more. This fact, as Mr. Riley remarks, coupled with its habit—like other true bugs—of taking food from the day of its birth to the day of its death without the intermission of a quiescent pupal state, renders it so destructive and so difficult to combat. It exhales, we should mention also, a very loathsome smell like another sometimes too familiar species of the same order of insects.

In the figure above representing the ordinary American Chinch Bug, it will be observed that the white wings reach to the extremity of the body, and are thus long enough to enable the insect to take flight. The Canadian specimens, found by Mr. Pettit at Grimsby, differ remarkably from this in having the wings only half as long as the abdomen, instead of the same length. (Fig. 48). This shortness of wing is no doubt, a very effectual check upon the spread of the insect, preventing it from flying in swarms from one locality to another as it often does in the Western States.



FIG. 48.

Natural Remedies.—There are two great causes which serve to keep in check these noxious creatures; first, the prevalence of numerous heavy showers of rain, and second, the onslaught made upon them by various carnivorous insects. To quote the words of Mr. Riley, who has published a long and exhaustive account of this insect in his *Second Missouri Report* (pp. 15-37).

“As the Chinch Bug, unlike most other true bugs, deposits its eggs underground, and as the young larvæ live there for a considerable time, it must be manifest that heavy soaking rains will have a tendency to drown them out. The simple fact, long ago observed and recorded by practical men, that this insect scrupulously avoids wet land, proves that moisture is naturally injurious to its constitution. Hence it was many years ago remarked by intelligent farmers, and we have ourselves

repeatedly observed the same thing, that very often when the spring opens dry Chinch Bugs will begin to increase and multiply in an alarming manner, but that the very first heavy shower checks them immediately, and repeated heavy rains put an almost entire stop to their operations. It is very true that nearly all insects will bear immersion under water for many hours, and frequently for a whole day, without suffering death therefrom; for although animation is apparently suspended in such cases, they yet as the phrase is "come to life again." But no insect, except the few that are provided with gills like fishes and extract the air out of the water, instead of breathing it at first hand, can stand a prolonged immersion in water without drowning. And it must be obvious to the meanest capacity, that an insect, such as the Chinch Bug, whose natural home is in the driest soil it can find, will have its health injuriously affected by a prolonged residence in a wet soil. It will be well, therefore, for farmers to bear in mind that, *in a hot dry season Chinch Bugs are always the worst and that in a wet season it is impossible for them to do any considerable amount of damage.*"

The Carnivorous Insects that prey upon this bug are stated by Mr. Riley to be four kinds of Ladybird, especially the spotted species (*Hippodamia maculata*, De Geer), represented in Fig 49; which also preys upon the eggs of the Colorado Potato Beetle and a number of

FIG. 49. other destructive insects; and the Plain Ladybird (*Coccinella munda*, Say), represented in Fig. 50,—both of these species are found in Canada.



Hipp. maculata.
Colours: Pink and black.

A species of Lace-winged fly (*Chrysopa Illinoensis*, Shimer), and various other parasitic insects also share in the useful work of keeping this pest in check.

Artificial Remedies.—Many modes of combatting the Chinch Bug

have been suggested from time to time in various agricultural publications. Those that appear to be most highly approved of are

thus summed up by Mr. Riley: (1) "Chinch Bugs hybernate in the perfect or winged state in any old dry rubbish, under dead leaves, in old straw, in corn shucks and corn stalks, among weeds in fence corners, etc. Therefore all such substances should be burned up, as far as possible, in the spring. (2) The earlier small grain can be sown in the spring, the more likely it is to escape the Chinch Bug; for it will then get ripe before the spring brood of bugs has had time to become fully developed at the expense of the grain. (3) The harder the ground is when grain is sown, the less chance there is for the Chinch Bug to penetrate to the roots of the grain and lay its eggs thereon. Hence the importance of fall ploughing and using the roller upon land that is loose and friable."

Should this insect, which is so terribly destructive in the United States, become at any time sufficiently numerous to cause alarm in this country, we shall feel much obliged to any observer who will afford us information upon the subject. It is not probable that it will become with us a permanent plague as it is in the West, but yet we may at any time receive a visitation from it and suffer great, even though only temporary, loss. Happily our Canadian variety, as we have noticed above, possesses wings too short to enable it to fly from place to place, we need therefore feel little fear that it will ever do more than affect some limited locality; what we should dread, however, would be an invasion from the long-winged American Bug.

FIG. 50.



Cocc. munda.
Colours: Light brick red, white and black.

4.—THE GRAIN APHIS (*Aphis Avenæ*, Fabr.)

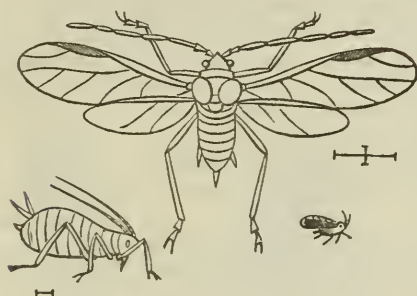
HEMIPTERA HOMOPTERA—APHIDÆ.

We come now to another insect pest that has been introduced into America from Europe, where it has been known for years as injurious to wheat, oats and other grain. Very little notice was taken of it, however, on this side of the Atlantic till the year 1861, when it attracted general attention from its appearance on grain crops of all kinds, both throughout Canada and the neighbouring States. Much alarm was excited by it, and the periodical press teemed with notices of its ravages and numbers, and with suggested remedies for its destruction. The next year it appeared again, but in much diminished numbers, and without creating the same alarm or excitement; since then though observed here and there every year it has remained in unnoticed obscurity, so far as the public in general are concerned. This change is not much to be wondered at, as it is the nature of this insect, like others species of plant lice, to appear suddenly in countless myriads in places where its existence even was

quite unsuspected; it is not at all unlikely, then, that we may some day have another visitation similar to that of 1861.

In our report of last year on "Insects affecting the Apple," (*First Annual Report*, page 77), we gave a description of the Aphis or plant louse that is often so injurious to the orchard, and made some remarks upon the general natural history of this singular family of insects. We need not, then, enter upon any further description of their extraordinary fecundity or other peculiarities. The Grain Aphis (*A. avenæ* Fab.) differs from that of the Apple (*A. mali*, Fab.), Fig. 51, in little more than colour and food-plant; its structure and general appearance is much the same. When feeding upon the stem or leaves of the plant, the Grain Aphis is green; but when it shifts its quarters to the ear, and feeds upon the grain, very few green specimens are found, the great majority being yellow, reddish-yellow, or brownish-red.

Fig. 51.



The accompanying illustration (Fig. 51) representing a highly magnified winged male and a wingless female, displays the structure and shape of the insects. Fig. 52 represents a female on a still larger scale. They live at first upon the leaves, scattered about singly or in groups; afterwards, densely gathered together upon the stems of the flowers and heads of grain. Their food consists of the sap of the plant which they draw out by means of a sucker or beak, on the underside of the head. They thus take away from the grain the elaborated sap which was intended to build it up, and so cause it to become more or less shrunk and deficient in size and weight.

When they occur in excessive numbers, they, of course diminish the yield of grain very materially; but it is not often that they are so abundant as to cause appreciable loss.

Fig. 52.



As in the case of the Apple Aphis the remedies for these creatures are chiefly those provided by nature. Artificial remedies, such as dusting with lime or sulphur, would be obviously impracticable in the case of a large field of grain; and even if feasible, the cost in time and labour would hardly be counterbalanced by the reduced inroads of these minute depredators. The natural remedies consist of various carnivorous or parasitic insects,

Fig. 53.



Fig. 54.



that prey upon plant-lice of all kinds. The most common and useful are the different species of lady-birds (Fig. 53); the Lace-winged Flies (*Chrysopa*), both in their perfect state (Fig. 54), and in their larval condition

Fig. 55.

Fig. 56.

Fig. 57.



(Fig. 55); the Syrphus Flies in their larval state (Fig. 56); Fig. 57 represents a winged Syrphus Fly; Dragon-Flies, &c.; all of which should be heartily encouraged by the husbandman.

5. THE JOINT-WORM (*Isosoma hordei*, Harris.)

HYMENOPTERA—CHALCIDIDÆ.

The wheat crops in the United States, and probably in Canada also, are frequently attacked by a minute insect in the stem, close to the first or second joint from the root. The effects of the attack are so like those produced by the Hessian Fly, that it is very often confounded with the latter insect, and not suspected to be a different enemy, belonging to a widely different order of insects. As it is so likely to be overlooked, we say that it has *probably* wrought mischief among the wheat fields in this country as well as in the neighbouring States; that it certainly has affected barley in this Province, we can testify from our own observation.

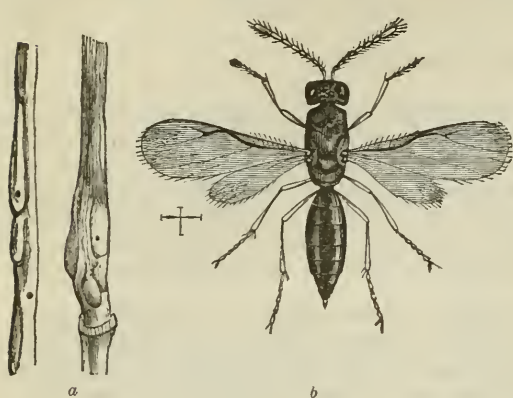
This insect, popularly termed, from its habits, "the Joint-worm," first attracted attention in Virginia about the year 1848, while the first published account of its depredations appeared in the *Southern Planter* in 1851, the editor of which gave the following description of its ravages*:—"A new and most destructive enemy to wheat has appeared under the name of the Joint-worm. Many crops in Albemarle are hardly worth cutting in consequence of its attacks, and all that we have seen or heard of, except one, are badly hurt by it. In the area it has traversed, and the completeness of its devastation within it it has no rival amongst insects in this country. The dreaded Hessian Fly is nothing to it, and no atmospheric calamity can pretend to a comparison. It sweeps whole districts, and everywhere, we hear, has done great damage, and, it is feared, will do much more before it is checked or destroyed." Prof. Cabell, of the University of Virginia, afforded similar testimony, stating that "in 1851 some farmers did not reap as much as they sowed," and that the loss occasioned by this insect often amounted to one-third of the average crop. In 1860—to quote an account in the *American Entomologist* for April, 1869—"the rye crop was considerably injured by this pest in Lycoming Co., Pennsylvania, and according to Mr. Norton, the species is very common upon rye in Connecticut, and probably the other New England States. As long ago as 1829 it had been noticed in various parts of the New England States to attack the barley, causing it in some places 'to yield only a very small crop, and on some farms not much more than the seed sown,' although since that date it does not appear to have been materially troublesome in that region. But in Central New York, formerly the great barley-growing district of America, it has been ruinously destructive to the barley since about 1850. In the words of Mr. George Geddes, the late President of the N. Y. State Agricultural Society, 'Formerly we expected forty bushels of barley to the acre; now we cannot rely on more than twenty.' And he goes on to state that this falling off is principally due to the depredations of the Joint-worm, and that, unless some relief from it is found, the farmers of Central New York will have to discontinue raising this crop." In the years 1866 and 1867 it was found by our friend, Mr. Pettit to be abundant upon barley in the neighbourhood of Grimsby, in this Province. (See *Canada Farmer*, 1867, pp. 238, 267.)

From the foregoing notices it will be seen that this insect attacks not only wheat, but also rye and barley, and that where it occurs it inflicts very great damage upon the crop. Some have supposed that these different crops are attacked by different, though very similar species; but it has been satisfactorily shewn by Mr. Walsh that all these Joint-worms, even though they present occasional variations in colour, are to be referred to the species described by Dr. Harris under the name of *Eurytoma* [*Isosoma*] *hordei*. With regard to the genus of the insect (the first of the two scientific names), there has been much discussion also; but in a report of this character it is unnecessary to trouble the reader with it. We shall merely state that we hold the opinion that the insect belongs to *Isosoma* (to which also pertains the grape-seed insect [*I. vitis*, Saunders], described by our coadjutor, Mr. Saunders, in last year's Report p. 109), and not to *Eurytoma*, a genus of parasitic flies.

The Joint-worm is a tiny footless grub or maggot, about one-eighth of an inch in length, of a pale yellow colour and with dark brownish jaws. It occupies a little swelling or cell

* Quoted by Dr. Fitch, 7th N. Y. Report, p. 145.

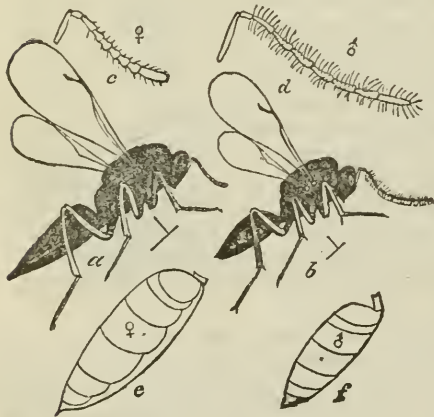
FIG. 58.



the Joint-worm produces its destructive effects upon the small grain may be readily explained. Not only is the sap of the plant extracted on its road to the ear, in order to form the abnormal woody enlargement or gall, in which the larvæ are imbedded, each in his own private and peculiar cell, but a very large supply of sap must be wasted in feeding the larvæ themselves. Hence the ear that would otherwise be fully developed becomes more or less blasted and shrivelled; although we are told that, in the case of barley more particularly, the plant tillers out laterally, so as partially to supply the loss of the main crop of ears."—*American Entomologist*, i. 150.

In Canada the Joint-worm fly (fig. 58. *b*, represents a female, regarded from above, and fig. 59. *a*, one of the same sex viewed laterally; *b*, in the latter illustration, is the male insect,)

FIG. 59.



other, apparently to make sure that it has not already been oviposited in. Head downward, they then begin by bending the abdomen downward, and placing the tip of the ovipositor on the straw at right angles with the body, when the abdomen resumes its natural position, and the ovipositor is gradually worked into the plant to its full extent. With the aid of a good lens, and by pulling up the plants on which they were at work (which did not appear to disconcert them in the least, I could view the whole operation, which, in some cases, was accomplished in a few minutes, and in others was the work of an hour or two. When a puncture was completed, they usually backed up a little and viewed it for a few seconds, and then apparently satisfied, moved to one side and commenced another."

In a few days the eggs hatch out, and the worm (fig. 60) commences to feed, snugly enclosed in its cell; when the grain becomes ripe, and the straw consequently hard and dry, the worm is generally full grown, but in this state it for the most part continues unchanged till the following spring,

FIG. 60.



inside the substance of the straw, and placed generally a little above the first or second joint from the root. These swellings, or "galls," are clearly shown in the accompanying illustration (fig. 58, *a*); the black dots indicate the holes through which the insect has finally escaped in its winged state (*b*). "At first sight, these knotty swellings of the stem are apt to elude observation, because, being almost always situated just above the joint or knot on that stem—whence comes the popular name "Joint-worms"—they are enwrapped and hidden by the sheath of the blade; but on stripping off the sheath, as is supposed to have been done in the engraving, they become at once conspicuous objects. The mode in which

makes its appearance about the beginning or the middle of June, and after pairing, proceeds—in the case of the female—to deposit its eggs on the young growing plants. In more southern latitudes the flies, as usual appear considerably earlier. Mr. Pettit, of Grimsby, to whom we were indebted at the time for a number of specimens of affected barley containing the insect, gave the following interesting account of the process of ovipositing in the *Canada Farmer* (Sept. 1867, p. 268):—"About the 8th of June of the present year the perfect insects began to make their way out of the galls. Being desirous of knowing more of their habits, I watched the growing barley, and on the 10th of June found them actively at work ovipositing in the then healthy stalks of the plant. Before commencing operations they walk leisurely up one side of the plant as far as the last leaf, and then down the

when it assumes the pupa state, and finally emerges as a four-winged fly in the month of June. This fly is about one-tenth of an inch in length; its wings are clear and transparent, its body black, and its legs dull pale yellow, sometimes darker, and even black. In fig. 59, *a* represents the female, *b* the male, *c* the antenna of the female, *d* that of the male, *e* the abdomen of the female, enlarged to show the rings or segments of the body, and *f* that of the male.

The best, in fact the only remedy that we can recommend for these insects when they prove abundant and destructive, is to burn all the stubble in the affected field and also all the refuse straw after the grain is threshed. By this means the larvæ enclosed in their cells will be consumed, and in them the parents of the next year's brood will be effectually got rid of. To ensure complete immunity from a second attack, it will be necessary that all the farmers in a neighbourhood should adopt the same method, else the insects hatched on one farm will easily fly over to another.

6. THE ANGOUMOIS MOTH (*Butalis cerealella*, Olivier.)

LEPIDOPTERA—TINEIDÆ.

The five great enemies of the wheat-plant that we have thus far described are all known to inhabit this country, though two of them—the Chinch Bug and the Joint-worm—not in any great numbers; and they have all, to a greater or less extent, come under our own observation. Besides these five species, there are several other insects that inflict depredations upon wheat, and often cause great loss to the owner; but happily they are most of them entirely unknown to us in this country, and of some of them we have never even seen a specimen, living or dead. Among these may be mentioned the insect whose name we have prefixed to this section.

The Angoumois Moth, according to Dr. Fitch, is one of the most destructive insects to wheat, barley, oats and Indian corn, in France, and was long ago introduced into the Southern States, where it has become fully naturalized. From thence it is frequently brought into New York in cargoes of grain, but the climate appears to be too cold for it to thrive and establish itself. We need not, then, feel much alarm respecting it in Canada.

The larva is a smooth, white worm, which attacks grain when stored in the bins of granaries or storehouses. Each individual worm attacks a single kernel of the grain, and consumes all the flour inside without injuring the external shell. It passes the pupa state also in the grain, and comes out in May, or in November as a tawny dull yellowish-grey moth, having its fore-wings commonly sprinkled with a few black dots, and expanding half an inch.*

The most effective remedy for the insect is to subject the infested grain to the heat of an oven, or of a very warm, dry room. To accomplish this, in France machines called "insect mills" have been invented. They consist of a large hollow iron cylinder, much resembling an ordinary coffee-roaster, into which the infested grain is put, and then the instrument is placed over a fire and revolved, heating the grain up to a certain point. In this way all the insects in the grain are killed in a short time, and with little expense. This might be found a useful mode of dealing with the Pea-weevil (*Bruchus pisi*), which is often very destructive in this country.

7. THE ARMY-WORM (*Leucania unipuncta*, Haworth).

LEPIDOPTERA—NOCTUIDÆ.

This is another redoubtable foe that the wheat-grower has to combat in many parts of the United States. The insect is very familiar to us here; we have frequently taken dozens of the moths by the process of "sugaring," on a warm summer's evening; but though abundant, we have never heard of its larvæ appearing in Canada as they do in the United States, in countless myriads, marching on in regular column, and devouring everything in the shape of grain or grass that comes in their way.

The following description of the insect we quote from the *American Entomologist*, (vol. 1, p. 215):—"The eggs hatch during the early part of May, in the latitude of South Illinois and Missouri, and the young worms may feed by millions in a meadow without attracting attention; but when they have become nearly full grown and have stripped bare the fields in

Vide Dr. Fitch's 7th N. Y. Report, pp. 127-133, from which our account is chiefly compiled.

which they were born, they are forced from necessity to travel in search of fresh fields, and it is at such times that they first attract general attention. A curious instinct leads them to travel in vast armies, and as they are now exceedingly voracious, devouring more during the last three or four days of their worm-life than they had done during the whole of their previous existence, they are very apt to strip the leaves from the blade of grass or grain on their way. On the other hand, they are attacked by at least five different parasites, and when we understand how persistent these last are in their attacks, and how thoroughly they accomplish their murderous work, we cease to wonder at the almost total annihilation of the Army-worm the year following its appearance in such hosts. Furthermore there may be influences at work, other than parasitic, which cause an increase or decrease in the numbers of this pest. It is a significant fact that almost all great Army-worm years have been unusually wet, with the preceding year unusually dry, as Dr. Fitch has proved by record. The present year, wherever they have so far appeared, forms no exception. for the summer of 1868 was unusually dry and hot, while the present year has been decidedly wet.

"The Army-worm, like all other insects, hatches from an egg, and this egg is evidently deposited by the parent moth at the base of perennial grass stalks. The worm varies but little from the time it hatches to the time when it is full grown. Some specimens are a shade darker than others, but on many thousands of specimens examined, we have found the markings very uniform, as represented in the next cut (fig. 61). When full fed, which is generally about four weeks after hatching, it descends into the ground, where it forms an oval chamber and changes to a shiny mahogany-coloured chrysalis (fig 62). Sometimes it scarcely penetrates beneath the surface, but forms a rude cocoon under what dry herbage there happens to be on the ground. Thus the worms vanish from sight very suddenly, and this sudden disappearance is as mysterious to those who have no knowledge of natural history, as was their abrupt advent. We doubt very much if a single one of the hosts which so recently animated the meadows, can be found in any of the localities above mentioned, by the time this reaches the eyes of our readers.

"After remaining in the chrysalis state about two weeks, the perfect moth appears (fig. 63). The general colour of the moth is light reddish brown or fawn colour, and it is principally characterized by, and receives its name from, a white spot near the centre of its forewings, there being also a dusky oblique line running inwardly from their tips."

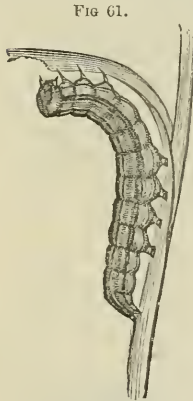


FIG. 61.

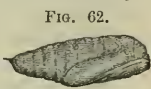


FIG. 62.

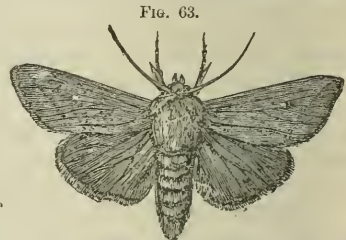


FIG. 63.

8.—THE WHEAT WIRE-WORM (*Agriotes Mancus*, Say)

COLEOPTERA—ELATERIDÆ.

Curtis, no mean authority, makes the assertion that "of all the insect enemies with which the farmer has to contend there are none which are more fatal in their effects, and more difficult to overcome, than the wire-worms." Certainly, when we consider the omnivorous character of the members of this family, the number of species belonging to it, and their general diffusion, we may feel inclined to agree with him. They attack every kind of production of the field and garden—fruits, flowers, grain, roots, grass, vegetables; nothing appears to come amiss to them. Over a hundred different species of the family (*Elateridæ*) are known to exist in Canada; a large number of them, however, are not especially destructive, but feed upon decaying vegetable matter, and may hence be deemed rather beneficial than otherwise. Still, enough remain to give us trouble and despoil us of a portion of the crops that we are endeavouring to raise.

Everyone, probably, is familiar with the appearance of the common species of wire-worms, that are so frequently turned up by the spade or plough in farm or garden. They are usually of a pale yellowish colour, with a darker head; the body is round, smooth, and hard, so as to be well adapted for penetrating the earth. After a long period of existence in the larval or worm state they turn into beetles that are familiarly known as "spring backs," "snapping,"

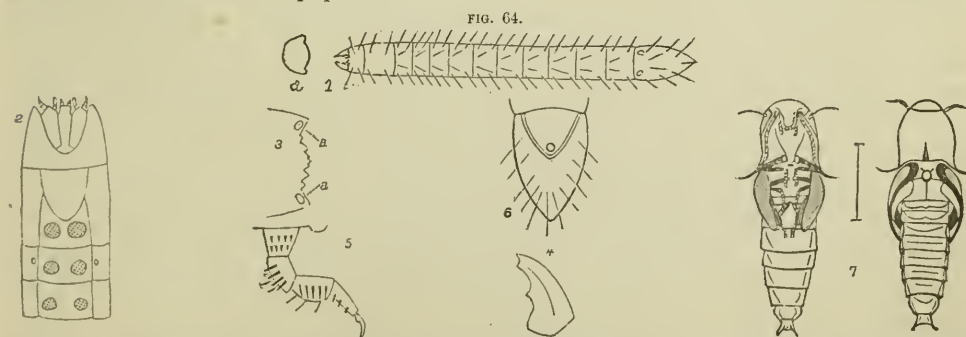
or "click-beetles" from their possession of the singular power of springing up into the air, when laid upon their backs, and thus recovering their proper position.

The wheat wire-worm, with which we are now more especially concerned, has long been known to farmers from the havoc it has frequently wrought in their fields of grain; it is only recently, however, that its natural history has been traced out. For the following account of its larval and pupal stages we are indebted to an article in the *Canadian Entomologist* (vol. iv., p. 2) by Mr. Pettit, a very careful and accurate observer. He relates as follows:—

"In the fall of the year 1870, so unusual an amount of damage was inflicted upon the wheat crops in this vicinity by this wire-worm that I was led to try and breed it to the perfect state, with a view to ascertaining what species it was the larva of. By digging about the roots of the wheat plants, I obtained about a dozen specimens, which were placed with a few wheat plants in a large flower pot, where they were kept supplied with food by planting occasionally a small quantity of wheat. With the first cold weather they ceased to eat, and were then placed in a sheltered situation until the return of warm weather in the spring, when they were restored to the breeding cage. They soon gave evidence of being alive, and possessing unimpaired appetites; their rapid consumption of the wheat plants rendered it necessary to renew the supply quite as often as before. They were fed in this way until the month of July, when my absence from home caused them to be neglected; on my return there was not a vestige of food left. Thinking that the worms had probably died of starvation, I paid no further attention to them until the 26th of August, when on removing a part of the earth from the pot, a pupa was disclosed, and on the 3rd of September the first imago appeared, which proved to be a specimen of *Agriotes Mancus* Say. As only two more specimens came out during the remainder of September, I turned the earth out of the pot and carefully examined it; the inspection revealed seven specimens of the imago in the little cells in which they had transformed, and one larva.

"Among the larvæ collected, I had noticed one less than half the size of the others, and evidently much younger, which would account for the one still in the larval state. It had attained, however, a size fully equal to that of the others when first brought in during the previous autumn; and hence I have formed the opinion that the larval state does not last longer than three years. This opinion has since been strengthened by the observation of a large number of larvæ, which appeared readily separable into *two sizes*, corresponding to those originally collected for breeding. Westwood, in his "Modern Classification of Insects," (vol. 1. 238), states respecting the larva of an allied species (*A. obscurus*) which, in Europe, feeds upon the roots of wheat, rye, oats, barley and grass, that according to Bjerkander, a Swedish Naturalist, "it is five years in arriving at the perfect state." Curtis, in his "Farm Insects," (page 161) makes a similar statement upon the same authority, and adds that those which he had himself feeding for ten or twelve months scarcely increased in size during the time. As already stated, however, I am of opinion that our species is by no means so long lived, but that it attains maturity in three years—a period quite long enough, the agriculturist must think, in which to inflict damage upon the crops."

The following illustration (Fig. 64), drawn by Dr. Horn, of Philadelphia, represents the wire-worm in its larval and pupal states:—



1. Larva much magnified, (natural size | ————— |) 1 a. Transverse section. 2. Underside of head and first three or thoracic segments, showing the parts of mouth and the position of first spiracle. 3. Margin of front; a. Position of antennæ. 4. Mandible. 5. Leg. 6. Terminal segment beneath. 7. Pupa, upper and under view. The line between represents the natural size.

Should any of our readers desire a full technical description of this insect, they will find a carefully prepared account of the larval and pupal states appended to Mr. Pettit's article in the *Canadian Entomologist* above referred to, and a description of the imago in Say's *Entomology*, (vol. ii., page 111.)

Wire-worms are usually found to be most destructive in freshly-broken up pasture lands, and during dry seasons. As we have elsewhere remarked, (*Canada Farmer*, 1871, p. 220), all sorts of remedies for them have been suggested and tried, but few are satisfactory. When a field is observed to be badly affected by them, it ought to be ploughed up and kept in fallow for a season, taking care to keep ploughing it as often as possible, and to burn up all rubbish, stubble, &c.; this will destroy the eggs and starve out the worms. Lime and soot, to be applied to the soil before sowing any grain, are highly recommended by some, but are of doubtful efficacy. Salt on sandy soils is considered to be efficacious, but not on heavier clay lands. In a garden or small field they may be got rid of by strewing about slices of potato, turnip, or apple, and examining the under side every morning. When numbers will usually be found feeding upon the bait. Moles are very useful in destroying them in meadows, and a large number of our small birds devour them with avidity; ducks, turkeys and fowls will pick them up in ploughed fields, and toads are not averse to making a meal upon them. Our advice then is, break up and fallow the infested fields, ploughing often, and burning up the rubbish, and encourage in every way the farmer's best friends, the small birds. Make it an absolute law of the household that not one of them is to be shot or stoned, get your neighbours to do the same, and believe us, not many years will pass before you will find your insect plagues enormously diminished.

Another American, though not Canadian. enemy of the wheat plant that might be mentioned, is the Wheat-maggot (*Meromyza Americana*, Fitch), the larva of a two-winged fly; it has been observed by Mr. Riley in Missouri to inflict considerable damage upon the growing wheat crop. As, however, it is not likely to trouble us in this Province, we may dismiss it from our consideration without further description.

In concluding this portion of our report we would respectfully request those among our readers whose grain crops may be affected by these or other pests to afford us some particulars respecting the attack; information regarding the time of appearance of these insects, their duration, mode of operation, and the estimated loss they occasion, would all be of great practical interest not only to us but to the agricultural community at large.

INSECTS INJURIOUS TO THE POTATO.

ATTACKING THE FOLIAGE ONLY.

BY E. B. REED, LONDON, ONT.

- | | |
|---|---|
| 1. The three-lined Leaf Beetle (<i>Lema tri lineata</i> , Oliv.)

2. The Colorado Potato Beetle, or Ten-lined Spearman (<i>Doryphora 10-lineata</i> , Say.)

3. The Striped Blister Beetle (<i>Epicauta vittata</i> , Fabr.) | 4. The Ash-Gray Blister Beetle (<i>Epicauta cinerea</i> , Fabr.)

5. The Potato or Tomato Worm (<i>Sphinx quinquemaculata</i> , Haw.) |
|---|---|

With the exception of wheat, that staff of human life, there is, we imagine, no other crop so universally cultivated both in farm and garden, and so important as an article of diet for all classes of the community, as that of the potato. Esteeming this vegetable so highly as we all do at this present day, it is somewhat amusing to glance back over its early history, and gather the opinions of some of our ancestors. At the end of the sixteenth century, nearly one hundred years after its introduction into Great Britain, we find a writer remarking that "they are much used in Ireland and America as bread, and may be propagated with advantage to poor people." The popular taste for this esculent tuber took a long time for its education, and it was not until the middle of the last century that the potato came into general use both in England and Northern America. It was even then long disparagingly described by the gluttonous wiseacres of the time, as "a root found in the New World, consisting of little knobs, held together by strings; if you boil it well, it *can* be eaten; it *may* become an article of food; it will certainly do for hogs; and, though it is rather flatulent and acid in the human stomach, perhaps, if you boil it with dates, it may serve to keep body and soul together, among those who can find nothing better." To us, of this nineteenth century, this verdict may seem most ridiculous, but we ought not to forget that there must be a very wide difference between "the little knobs" of those early days, and the magnificent growth to which proper cultivation has now brought the potato. In this noble Province of Ontario, we find that this crop is annually becoming larger and more important, and therefore anything that affects its prosperity cannot fail to be of interest to all our agriculturists, and the more especially at this period when we are threatened most seriously with the attacks of an insect that has completely devastated the potato fields for some years past in the Western States. The recent advent of the Colorado potato beetle in Canada, has excited considerable apprehensions among our farmers and gardeners; and we have, therefore, thought it desirable to lay before our readers, a plain and accurate account of some of the various insects which infest the potato, and whose attacks are directed exclusively against the foliage of the plant. The senior Editor of the *American Entomologist*, the late B. D. Walsh, in a very able and exhaustive article on this subject, has admirably epitomised the following sketch of the insect foes of the potato, he writes: "There are no less than ten distinct species of bugs, preying upon the potato plant within the limits of the United States. Many of these ten species are confined within certain geographical limits. The habits and history of several of them differ as widely as those of a hog and a horse; some attack the potato, both in the larval state, and in the perfect or winged state; others in the perfect or winged state alone: and others again in the larval state alone. In the case of seven of these insects, there is but one single brood

every year, while of the remaining three, there are every year from two to three broods, each of them generated by females belonging to the preceding brood. Eight of the ten feed externally upon the leaves and tenderer stems of the potato, while two of them burrow like a borer exclusively in the larger stalks. Finally almost every one of these ten species has its peculiar insect enemies, and a mode of attack which will prove very successful against one, two, or three of them will often turn out to be utterly worthless when employed against the remainder." While happily for Ontario, our potato crops are not as yet subject to the attacks of quite so many noxious insects as appear to afflict our neighbours over the lines; yet we have already a sufficient number to make us very anxious to ascertain any mode of destroying them, and to become acquainted with those friendly insects whose chief mission seems to be to assist the agriculturist in his arduous efforts.

1st. THE THREE-LINED LEAF BEETLE, (*Lema tri lineata*, Oliv.)

Order, COLEOPTERA; Family, CHRYSOMELIDÆ,

Eating the leaves of the potato both in the larval and perfect state.

This beetle belongs to a family of destructive insects that spend the chief part of their lives upon the leaves of various plants, and which as they derive their entire nourishment both in the larval and perfect state from leaves only, may fairly be called leaf beetles.

FIG 65.



Colours, Pale Yellow and Black.

FIG 66.

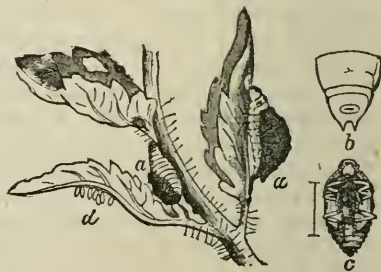


Colours, Yellow and Black.

The perfect beetle Fig No. 65 is of a pale yellow colour with three black stripes on the wing cases; the intervening spaces of yellow are thickly covered with small punctures or indentations; and on the thorax or throat are two black spots. It bears a very strong resemblance to the common cucumber beetle, (*Diabrotica vittata*, Fabr.) Fig No. 66, from which however, it may readily be distinguished, by its somewhat darker shade of yellow, its slightly larger size and by the peculiar formation of the thorax, which is what naturalists term "constricted" or what may be better described as being pinched in at the sides after the fashion of a modern young lady's waist. It also differs in some other respects which are less obvious. The larva of the three-lined leaf beetle may at once be known from all other larvæ that feed on the leaves of the potato by its peculiar and unsightly habit of covering its back with its own castings. In Fig 67 (a, a) the larva which is of a dull white colour, is shewn in profile, both full and half grown, covered with the soft greenish excrementitious matter which it discharges from time to time. (Fig. 67 b) shows

the last few joints of the abdomen of the larva magnified and viewed not in profile, but from above. The vent of the larva as may be seen from this last figure is situated on the upper surface of the last ring, so that its casting falls upon the back, and by motions of the body is with each successive discharge pushed forward towards the head, until the whole back of the insect is entirely coated with it. When the load becomes too heavy, or gets hardened by exposure to the air, it is thrown off by the insect, and the process is commenced anew. Former writers have thought that this curious device was intended as a protection from the rays of the sun, for the tender and soft bodies of the larvæ, but we do not agree with this view, for there are many other larvæ, of various species, destitute of any such protection, whose skins are equally tender and sensitive, and we incline to the more rational opinion, that this singular shield is provided as a security against the attacks of Ichneumon flies, who frequently deposit their eggs in the living bodies of their victims. It is also possible that this repulsive covering may be of service against the attacks of birds, for we do not remember ever to have noticed any birds feeding on these larvæ. Fig 67 (c) presents a somewhat magnified view of the pupa.

FIG 67.



Colour—Dull White.

There are two broods of this insect every year: the first brood of larvæ may be seen on the potato vines during the month of June. The grubs are rather short, and almost cylindrical, being thickest in the middle, they are of a greyish-white colour with a blackish head, and two black spots on the next segment of the body; they have six legs arranged in pairs beneath the first three segments. Dr. Harris, the late talented Entomologist of the State of Massachusetts, points out as another noticeable peculiarity of this larva "that, in eating, the grub moves backwards, never devouring the portion of the leaf immediately before the head, but that which lies under it." When the grubs are about a fortnight old, they are fully grown; they then cease eating and leave the vines, descending into the earth where each larva having formed for itself a small oval cell lined with a gummy cement, changes into the pupa, Fig 67 (c) from which after the lapse of another fortnight the perfect beetle emerges. After coupling in the usual manner the female lays its oblong yellow eggs (which are glued to the leaves in parcels of six or eight together) fig 67 (d), on the underside of the leaves of the potato; from these eggs the larvæ usually make their appearance about August. This second brood remains in the ground all winter in the pupal or inactive state. The perfect beetle when held between the fingers emits a shrill creaking noise. It is common everywhere in Ontario, and indeed in many parts of the Province of Quebec, and has been known to Canadian Entomologists for a long period. This insect is very prolific, and the larvæ are very voracious, so that the ravages they commit on the vines are sometimes of a serious character; in the neighbourhood of Kincardine, the beetle this year did great mischief, in some cases affecting nearly the whole crop and by its numbers and enormous appetite causing the farmers of that district to believe that the "True Simon Pure," the Colorado potato bug, had at last got amongst them. Specimens of the insect in its different stages were sent to us for identification by the editor of the "*Bruce Herald*" and a short sketch of its history was furnished by us to that paper. We have also heard from several other portions of this Province, that this beetle has during the past year caused an unusual amount of damage among the field potatoes. It is almost always present more or less in our gardens, and is often especially annoying to those who cherish ardent hopes of that *summum bonum* of vegetable felicity, "an early dish of young potatoes." We notice that a correspondent of the "*American Entomologist*," writing to that periodical states "That the early Goderich potato seemed to be peculiarly subject to the attacks of this beetle." This may be an exceptional case, for we do not remember ever to have noticed any such peculiarity in the various sorts of potato vines including the early Goderich that we have found infested with *Lema trilineata*.

As a remedy we have ourselves sometimes obtained good results from dusting the leaves and young larvæ with a mixture composed of one-third air-slacked lime, and two-third's ashes. We have also caught incredible numbers of the perfect beetle in a very short time, by brushing them off the leaves into an open pan or dish of warm water, if this is done in the early part of the season when the insect first appears, it is obvious that their numbers can be considerably lessened. In these remedial efforts, however, as in everything else in this world of ours, "union is strength." In towns especially, where our gardens are so surrounded by those of other people, these remedies are often rendered practically useless, by the neglect of our neighbours to make similar efforts to destroy the enemy, and as the perfect insect is a lively beetle and active on the wing, it is very aggravating after clearing out our own garden to find it immediately reinvested by hosts, which drop over the fences from our neighbour's lot, where they have been lazily suffered to accumulate at their ease.

2ND.—THE COLORADO POTATO BEETLE, OR, TEN-LINED SPEARMAN.— *phoru*—10-*lineatu*, Say.)

Order, COLEOPTERA—Family, CHRYSOMELIDÆ.

Immense numbers eating the leaves of the potato all through the summer both in the larval and perfect state.

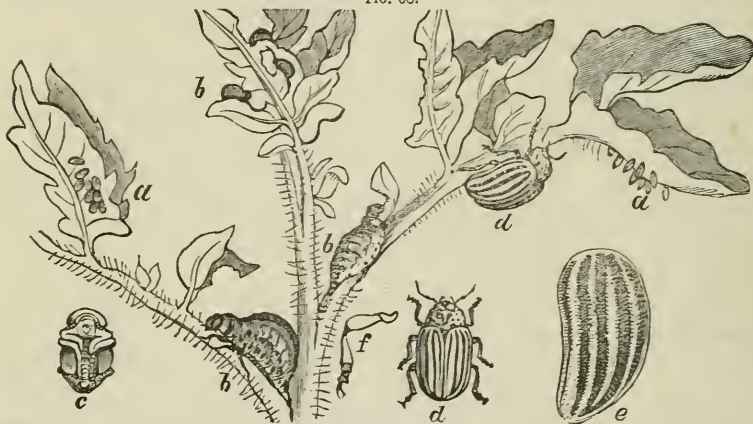
The summer of 1870 will be noted among Canadian entomologists as being the unlucky period when the Colorado potato beetle first made its appearance on the western shores of the Dominion. Previous to that date Canada had been comparatively free from any insects that affected to any great extent the general growth of the potato, but the advent of this beetle will,

we fear, seriously affect the yield of the crop throughout the districts infested by this pest, unless some remedial measures are adopted. For some years past rumours have reached us of the great ravages caused by this insect in the Western States, and observers among us have marked its steady onward march which nothing seemed to check, but now that, utterly regardless of international treaties, this beetle has crossed the boundary line and forcibly annexed this fair Province of Ontario and is endeavouring to establish the "Monro doctrine" among our potato crops, we think it will be well worth our while to enquire into the history of this Coleopterous Fenian and see what remedies we can devise to check its operations.

As this insect is comparatively new to Canada, although its history has been fully investigated in the United States, we have condensed much of the following report from American writers, who have carefully experimented on this beetle. We allude especially to Dr. Asa Fitch, of New York State, Messrs. Walsh and Riley, the editors of the *American Entomologist* and Dr. Henry Shimer, of Illinois.

The Colorado Potato Bug, as it is generally called, is not really a bug, but a true beetle belonging to the order of insects known as the *Coleoptera*, a word signifying wings enclosed in a sheath. Mr. Thomas Say, the celebrated American entomologist, who first discovered this insect placed it among a family of beetles named *Doryphora*, a Greek word meaning "a spear bearer" in allusion to a long conical horn projecting from the breast, which many South American species of this genus possess, although in the Colorado beetle and one or two others of the same family this typical peculiarity is wanting. Our species is named *10-lineata* from the ten lines on its wing cases.

FIG. 63.



Colors—(a) deep orange; (b) and (c) venetian red, inclining to cream color; (d) and (e) cream color and black.

Fig. 63 represents the Colorado Potatoe Beetle in all its stages. The eggs (a, a), which are of a deep orange color, and are deposited on the under side of the leaves of the potato vines, in patches of thirty or forty; (b, b, b) the larvæ in various positions and different stages of their existence; (c) the pupa or crysalis state; (d, d) the

perfect beetle; (e) one of the wing cases enlarged to shew the five lines; (f) the leg enlarged.

The plants that this beetle selects for its food belong chiefly to the genus *Solanum*, a sub-family of the order *Solanaceæ*—an order which, although it furnishes but few plants that add to the comforts, or supply the wants of mankind, contains two which enter largely into the consumption of the dwellers in temperate climates. We allude to the POTATOE and TOBACCO. In addition there are the Egg Plant and the TOMATO, the latter being also cultivated on this continent as a field crop.

In 1824, Mr. Thomas Say, while acting as naturalist to Long's exploring expedition to the Rocky Mountains, described this insect from specimens obtained by him on the Arkansas and Upper Missouri rivers. It appears from his account to have been tolerably common there. Its natural food has been presumed to be a wild species of potato (*Solanum rostratum* of Dunal) peculiar to the regions of the Rocky Mountains, and not found east of the Mississippi: for in 1864 Dr. Velie, the ornithologist of Rock Island, Illinois, and Dr. Parry, the botanist of Davenport, Iowa, while in Colorado, saw numbers of this insect feeding on the *Solanum rostratum*, and forwarded numerous specimens to Mr. B. D. Walsh, the late State Entomologist of Illinois, who was satisfied that they were the same species as that feeding on the cultivated potato. Occasionally it may feed on the tomato, and Mr. Walsh records hav-

ing noticed a few specimens feeding on the ground-cherry (*Physalis*) and on the imported Jamestown weed, or gympson weed (*Datura*). Mr. J. Egerton, of Gravity, Iowa, appears to have been the first person who called attention to the injurious properties of the Colorado potato beetle. In a letter to the *Prairie Farmer*, of August 29th, 1861, he writes "that they made their appearance upon the vines as soon as the potatoes were out of the ground, and there being a cold spell of wet weather about that time, they devoured them as fast as they were up." How they came to attack the cultivated potato is ingeniously explained by Mr. Walsh in the *Practical Entomologist* of October 30th, 1865, in the following manner:—

"But it will be asked, where does this insect come from? And how does it appear that it did not trouble the Iowa farmers before 1861, and the Illinois farmers before 1864? I believe I can explain this satisfactorily. Unlike several other noxious insects, it is not a general feeder, but is confined to plants belonging to the botanical family *Solanaceæ*, and especially to the *Solanum rostratum*, a plant (as we have seen) not found east of the Mississippi. Assuming, therefore, that this wild *Solanum* is the natural food of the insect, and that the region of the Rocky Mountains is its natural home, its range for a long series of years would be limited by the range of the plant it feeds on. But in progress of time civilization marched up to the Rocky Mountains; potatoes were planted in Kansas, Nebraska, and Colorado, and the insect discovered that one species of *Solanum* was about as palatable as another. Having thus acquired a taste for potato leaves, it would naturally spread eastward from potato patch to potato patch, until it overspread Iowa, and finally overleaped the Mississippi into Illinois. In confirmation of this theory, R. W. Hagen, of Fremont, Dodge County, Nebraska, says that 'the potato bug which is so destructive in that region was first discovered in 1859, about 100 miles west of Omaha City, whence they have been marching eastward annually.' From Omaha (city to Rock Island, Illinois, is over 260 miles, so that if the above statement is correct, it appears that the insect has travelled about 360 miles in six years, or at the average rate of sixty miles a year. At this rate of progress it will reach the Atlantic in about fourteen years." This prediction of Mr. Walsh appears to be in a fair way of being realized, although in a far speedier manner than he anticipated. Commencing in the State of Colorado, this beetle has gradually worked its way through the States of Kansas, Nebraska, Iowa, Minnesota, Illinois, Michigan, Wisconsin, Missouri, and Indiana. It has also spread over a great part of Ohio, and Dr. Trimble, of New Jersey, reported some time ago that it had appeared in Pennsylvania. And now, since 1870, it has fairly established itself in the Western Peninsula of Ontario, and is fast extending eastward. Time will show whether Canadians, profiting by the sad experience of their American friends, will use any proper exertions to stay the ravages of this destructive pest. To be forewarned is to be forearmed, and we will have but ourselves to blame if we sit still, and with folded hands suffer the Colorado beetle to work its own way without let or hindrance.

The mature insect or perfect beetle, (Fig 68 *d. d.*) is about one-third of an inch in length the female being slightly larger.

It is of a regular oval form, very convex above and flat beneath: its wing covers which are smooth and shining are of a yellowish cream colour with ten black lines or stripes (five on each wing case) placed lengthways, the wings are of a bright rosy hue, the body is cream coloured. With this combination of colours the insect presents a beautiful and attractive sight as it flies about in the bright sunshine.

The perfect beetle makes its first appearance about the end of May or the early part of June, having left the ground where it has passed the winter in the pupa stage (Fig 68 *c*). The eggs, (Fig 68 *a a*), which are deposited on the under-side of the leaves hatch in about a week after being laid. The young larva is at first almost black, but shortly becomes of a lighter colour. It is a most voracious feeder. In about a fortnight the larva attains its full growth and ceases eating. From experiments made by Dr. Henry Shimer, of Illinois, he estimated that during the time that elapses between the birth of the larva and its arrival at maturity it increases its original size and weight nearly two hundred times, shewing the enormous eating powers possessed by this insect. Its appearance at this period is of a reddish orange colour, the head and legs are black, the hind part of the second segment is also black, the anterior part being a pale yellow, there are two rows of black spots on each side of the body, and the abdomen is large and swollen. Dr. Shimer states that it uses its tail to assist its movements, and when alarmed by being touched it curls up and "plays possum." The larva being now full grown seeks shelter in the earth, where in the course of three or four days it changes

into the pupa state, (Fig 68 *a*), from which in about ten days afterwards the perfect beetle makes its appearance, being just about one month from the date of hatching and five weeks after the laying of the eggs. According to Dr. Shimer, the beetle "in about seven days after its maturity begins to pair, and at about the fourteenth day on an average begins to lay its eggs, thus in fifty days after the egg is laid the offspring begins to propagate." The same gentleman also states as some of the results of a most carefully conducted series of experiments that "from an equal number of males and females, well fed and made as comfortable as possible in confinement, I obtained an average of 719 eggs to each female; but in the fresh pure air, sunlight and freedom of nature under propitious circumstances, I have no doubt of its exceeding a thousand. They laid some eggs every day for forty days, commencing July 15th and ending on the 1st September. The smallest average was in the first part of the time, being $7\frac{1}{2}$ eggs per day to each female; the greatest average was about the middle of the time 75 eggs, the last day they averaged $12\frac{1}{2}$ eggs." Mr. Walsh in the *American Entomologist* states "That there are about three broods of larvæ every year in North Illinois and Central Missouri, each of which goes under ground to pass into the pupa state, the two first broods coming out of the ground in the beetle state about ten or twelve days afterwards, while the last one stays under ground all winter and only emerges in the beetle state in the following spring, just in time to lay its eggs upon the young potato leaves." We thus see that at almost any period during the summer months the insect can be found in all its stages. Assuming Dr. Shimer's average of 700 eggs for each female and that there are three broods per annum, and also assuming that one-third of the eggs produce fertile females, we might thus obtain in the course of one season the enormous number of thirty-eight million three hundred and thirty thousand larvæ as the produce of one single pair of beetles. Bearing in mind what we have stated about the voracity of the larva, we may well tremble for our potato crops when the Colorado beetle gets fairly established among us. This beetle, like many noxious insects, will be more numerous and do more damage some years than others, owing to various circumstances, such as propitious weather, and the lack or cessation of the attacks of its various insect enemies, but we may as well make up our minds to seeing this obtrusive stranger permanently located in Ontario whether we like it or not. Mr. Walsh wrote "That we shall have the Colorado Bug, in smaller or larger numbers, always among us, I have no more doubt, than that we shall have always more or less thunderstorms in the valley of the Mississippi."

It now remains for us to see how we are going to fight this prolific foe. In the first place, kind Mother Nature has as usual come to the rescue, and we are able to enumerate some 22 kinds of insects which prey upon the Colorado Potato Beetle, and in all probability the list will increase as our investigations become more perfect. We give below a tabular list of these insects.

COLEOPTERA.

1. *Tetracha virginica*, Hope.—Not taken in Ontario.
2. *Passimachus elongatus*, Lec.— " " yet.
3. *Calosoma calidum*, Fabr.—Common in Ontario.
4. *Harpalus caliginosus*, Say.— " "
5. *Hippodamia maculata*, Geer.— " "
6. " 13 *punctata*, Linn. " "
7. " *convergens*, Guérin.—Not common in Ontario.
8. *Coccinella*, 9 *notata*, Herbst.—Very common in Ontario.
9. *Mysia*, 13 *punctata*, Oliv.—Not uncommon in Ontario.
10. *Epicauta cinerea*, Fabr.— " "
11. " *vittata*, Fabr.—Common in Ontario.
12. *Lebia grandis*, Hentz.—Rare in Ontario.
13. *Philonthus*, Sp. undetermined.

HEMIPTERA.

14. *Reduvius raptatorius*, Say.—Taken in Ontario.
15. *Arma spinosus*, Dallas.— " "
16. *Harpactor cinctus*, Fabr.— " "
17. *Coreus tristis*, De Geer.—Common in Ontario.
18. *Perillus circumcinctus*, Say.—Taken in Ontario.
19. *Stiretrus fimbriatus*, Say.— " "

ARACHNIDA.

- 20.
- Phalangium*
- .—Common in Ontario.

DIPTERA.

- 21.
- Promachus apivorus*
- , Fitch.—Not taken in Ontario.

- 22.
- Lydella doryphoræ*
- , Riley.—“ “

Of this array of insects, some 12 are tolerably common in Ontario; and these we will introduce, with all the honours, to our readers, contenting ourselves with a brief reference to the others.

Tetrachea Virginica (No. 1), and *Passimachus elongatus* (No. 2), are two handsome ground beetles, and, in all probability, will not be found in Ontario.

Epicauta cinerea (No. 10), and *Epicauta vittata* (No. 11), will be treated of hereafter as enemies, although they appear to have the credit of attacking the larvæ of the Colorado Beetle. Until their reputation for good is somewhat better established, they should be looked upon with every suspicion.

Lebia grandis (No. 12), is an active beetle, with dark blue wing-covers, and yellowish brown head, thorax and legs.

Promachus apivorus (No. 21), is a large, savage, two-winged fly; it is commonly known as the Nebraska Bee-killer.

Lydella doryphoræ (No. 22), the Colorado Potato Beetle parasite, is also a two-winged fly. It closely resembles, in colour and size, the common house-fly, having, however, a brilliant silver white face, by which it may readily be distinguished. It deposits its eggs in the body of the living larva, and the grubs hatching therein finally destroy the larva. Mr. Riley, who appears first to have noticed this insect, states, that in 1868 it destroyed in his garden ten per cent. of the first brood, and fifty per cent. of the second brood, of the Colorado Beetle; so we will gladly welcome this friend to our shores, and trust that he will follow his enemy without waiting for the ceremony of an invitation from us.

We now come to those insect friends that we meet with in this Province. The five that we are now about to describe attack the Colorado Potato Beetle in the egg and larval state only. They belong to an order of beetles called *Coccinellidæ*, and more popularly known as Lady-birds or Lady-cows. These titles are remnants of the olden times, when the Roman Catholic religion was the only Christian system, and these insects, being supposed to be under the special protection of the Virgin Mary, were honoured with her name, and called the Birds of our Lady, or Cows of our Lady, just as in France the children still give them the names of “*Bêtes de la Vierge*,” “*Bête à bon Dieu*,” or “*Vaches à Dieu*.” The perfect beetle, when touched, exudes from its abdomen a dark yellow mucilaginous liquid, of a pungent and disagreeable odour. This was formerly supposed, by the ignorant, to be a sure remedy for the toothache.

All the larvæ of the Lady-birds bear a strong family resemblance to each other, and figure 69 will give a tolerably good idea of their appearance. They are very active, and generally very numerous. When the larva has eaten all it can manage, and is arrived at maturity, it fastens itself to a leaf by the extremity of its tail, and then the skin splits off and leaves the pupa, from which, in about twelve days, the perfect beetle emerges. Their eggs, which are somewhat similar to those of the Colorado beetle, being, however, smaller in size, and laid in lesser groups, are often deposited quite convenient to those of the Colorado beetle, so that the young larva, when hatched, has seldom very far to search for food. We may mention here that our friends the Lady-birds are the most inveterate destroyers of aphids and almost all plant lice, so that their good services are nearly inestimable.

THE SPOTTED LADY-BIRD (*Hippodamia maculata*, De Geer).—Fig. 70 is a small pinkish beetle marked with large black blotches.

THE NINE-MARKED LADY-BIRD (*Coccinella 9 notata*, Herbet).—Fig. 71 is somewhat rounder than the last, its colour is brick red, and it has nine black spots; this insect is one of our most common beetles, and may be found in every part of Canada.

THE THIRTEEN-DOTTED LADY-BIRD (*Hippodamia 13 punctata*, Linn).—

FIG. 69.



Colour—Black and orange.

FIG. 70.



FIG. 71.



FIG. 72.



Fig. 72 is larger than either of the preceding. It has thirteen black spots on a brick red ground.

THE CONVERGENT LADY-BIRD (*Hippodamia convergens*, Guen.)—Fig. 73 is of a deep orange red colour, marked with black and white. It has, according to Mr. Riley, been of immense benefit in checking the ravages of the potato beetle. Its larva is blue, orange and black in colour, and in its pupal or inactive state it is of the exact colour of the larva of the Colorado beetle, and is doubtless quite often mistaken for that larva and ruthlessly destroyed. We see, therefore, that it is necessary to exercise some little discrimination, and not to destroy both friends and foes in one fell swoop. *a* shows the larva, *b* the pupa suspended by the tail from a stalk, and *c* the perfect beetle.

FIG. 73.

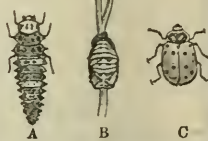
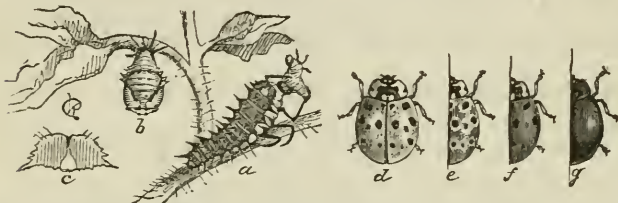


FIG. 74.



THE FIFTEEN-SPOTTED MYSIA (*Mysia*. 15 *punctata*, Oliv.)—Fig. 74. As this insect was discovered by us, attaching the Colorado larvæ, it may be of some interest to our readers to give a short sketch of its procedure, especially as all the Lady-birds already de-

scribed act in a similar manner in their attacks on the eggs and larvæ. It was sometime during the latter part of July, 1871, while wandering about the outskirts of a large potato patch, and examining the damage caused by the Colorado beetle, that we found on the vines the larva of a beetle belonging to the family of the Lady-birds. The insect was new to us, and, although there were no larvæ of the Colorado beetle in the immediate vicinity, yet we were in hope that we had discovered a new enemy of our abominable pest. To test the question more at leisure, we took our welcome treasure home, and placed it in a box, wherein were numerous specimens of Colorado larvæ in all stages, from the diabolical-looking little monster just hatched from the egg, to the full-grown, fat, and repulsive larva, dragging its bloated body slowly about in search of some convenient place in which to undergo the transformation into the pupal state. The box was roomy, and covered with a glass top, so that we had ample opportunities of observing what took place. After a little preliminary tour of observation, the Lady-bird caught sight of a small Colorado, and immediately commenced a fierce attack upon the unhappy little victim, seizing it in the powerful jaws, with which Dame Nature has provided most of these creatures, and, in the course of a very few minutes, sucking the juices completely out, and leaving only the dry and blackened-looking skin as a ghastly monument of its victory. It then commenced its attacks, after a short interval, on a full-grown specimen which, however, had strong objections to being devoured alive, and struggled viciously with its enemy, which was not nearly so large, although, of course, much more active. Its efforts at resistance were vain, and after the Lady-bird larva had got its jaws firmly fixed in its victim's broad and capacious back, the struggle soon ceased, and it became a question of the capacity of the Lady-bird to contain all the juices that were in the body of its corpulent victim. Nearly an hour was occupied in this little operation and when it was over, our friend retired to rest on its laurels and digest its enormous meal at its leisure. For several days we watched, at different times, a repetition of the same thing, and the Lady-bird must have consumed some eight or nine Colorado larvæ. We regret that we neglected to make any description of this larva, and being called away from home just at this time, we found, on our return, that the larva had gone into the pupal state, and a few days afterwards the perfect beetle emerged, and proved to be a very light coloured specimen of *Mysia* 15 *punctata*, Olive., fig. 74. This beetle, as may be seen from the engraving, varies much in its perfect form, so much so, indeed, that a careless or unskilled observer would never imagine that these four insects belonged to one and the same species. The drawing is from the clever pencil of Mr. C. V. Riley. *a* shows the larva attacking a Colorado beetle larva, *b* the pupa, and *d*, *e*, *f*, *g* the various forms of the perfect beetle varying in colour from very light grey to deep chestnut brown.

Fig. 75.



Colors—Black with coppery clots.
Colorado potato beetle.

Fig. 76.



Color—Dull black.
rostrum or beak, others again have cannibal

The next two insects belong to an order of beetles known as the *Carabide* or carnivorous ground beetles, they are predaceous both in the larval and perfect states, and they attack both colorado beetle and the larvæ probably on the ground, or whilst the larvæ are buried in the pupal state.

Calosoma calidum, (Fabr) Fig. 75. The glowing Calosoma, is a large handsome shining black beetle, with six rows of deep impressed coppery spots, which give the insect a most curious appearance. It is a very active beetle, and is of great service to the agriculturist or gardener being especially fond of cut worms, fortunately it is very common.

Harpalus caliginosus, (Say) Fig. 76. The murky ground beetle is of a dull black colour, it may be easily recognized from its figure.

Mr. C. V. Riley, states that it is a very formidable enemy to the

Agriculturists should learn to distinguish these carnivorous ground beetles and never destroy, them for they do an incalculable amount of benefit. We give at Fig. 77, an illustration of the larva of *Harpalus pennsylvanicus*, a congener of *H. caliginosus*, and as we showed in our report of last year a most inveterate foe to the plum curculio. The figure gives a very good idea of the general appearance of the larvæ of these ground beetles, which may often be met with under stones and stumps in slightly moist places.

The next six friendly insects belong to the true bug family *Hemiptera* or half wings, many of which emit a most disagreeable pungent odour. Many of these Hemiptera are plant feeders, deriving all their nourishment from the juices which they suck in their projecting

Fig. 77.



more suitable beak. *Arma Spinosa*, (Dallas), Fig. 78. The spined soldier bug, is a smallish bug, of an ochre yellow colour. It has done much work in the Western States among the Colorado Potato Beetles. The figure *b* shows one wing extended, *a* gives a view of (much enlarged) of the rostrum or beak. It is a

true cannibal, and is found in Ontario.

Fig. 78.



of its general appearance.

Fig. 79.



Reduvius raptatorius, (Say,) Fig. 79. The rapacious Soldier Bug, is of a light brown colour, and bears a good name for attacking the Colorado Beetle. It is also a cannibal and is found in Ontario.

Perillus circumcinctus, (Say) Fig. 80. This little friend was brought to us this last summer, having been caught in the act of killing a Colorado larva. It is a handsome beetle of a deep chocolate-brown colour, with broad margins and bands of creamy white, the figure gives a capital idea

its operations, and mode of attack. It moved very quickly, and attacked the larva with a sudden dart of its sharp-pointed beak. The larva, of course, struggled with all its power, yet it never seemed at all to loosen the hold of the bug, which rather surprised us, for we were at a loss to see what enables the beak to be retained so firmly, for it is tolerably smooth and easy of withdrawal if the bug is willing. Yet when we at-

Fig. 80.



tempted to take the larva off the beak, we had to use some slight degree of force. The bug, moreover has a curious fashion of planting himself squarely and firmly on his feet, with the beak raised horizontal, and the victim poised or spitted on it, and writhing about quite clear of the ground. We had the curiosity to weigh the bug and also a larva which we saw it attacking, and the larva was very nearly as heavy as the bug, and yet it seemed no exertion to

the bug to raise its victim on the point of its beak and hold it suspended there while it sucked out the contents of the body.

Stiretrus fimbriatus, Say.—The Bordered Soldier-Bug is something like the preceding, but dark olive green, with cream-coloured markings.

Harpactor cinctus, Fabr.—The many-banded robber is a member of the same family as *Reduvius raptatorius*.

Coreus tristis, De Géer.—The common Squash Bug has been mentioned several times as an enemy of the Colorado Beetle, but we do not feel sure that this reputation is fairly earned. We intend, however, this coming season, to make experiments with this Bug, which is exceedingly common, and is usually productive of much damage among the squash, cucumbers and melons.

Phalangium.—The common Daddy Long-legs is said by people in Illinois to be a potato bug destroyer. To this long list of insect friends to man, we add a member of the mammalia, which is not usually regarded with very friendly eyes, and that is the Skunk. Mr. W. Le Baron, the State Entomologist of Illinois, thinks that there is some slight evidence of this little animal being a devourer of Colorado larva, especially as it is well known to destroy the May beetle, and its larva, the white grub, and some other of the larger sized insects. "That the skunk," writes Mr. Le Baron, "should eat potato bugs has no intrinsic improbability, and I think every one must be impressed with a feeling of the extreme appropriateness of the diet." Perhaps some fastidious people may think that the remedy in this case is worse than the disease and may exclaim with all due earnestness, "save us from our friends."

There is a great diversity of opinion as to whether poultry will or will not eat the larvæ of the Colorado Potato Beetle, and whether if they do eat them any injurious effects will follow. We have obtained much contradictory evidence on this point. A few people asserted that some of their poultry had suddenly sickened and died, after eating freely of the insect; while others stated that their turkeys, ducks and fowls, had eaten the larvæ greedily and with perfect impunity. One gentleman, in Illinois, states that he has taught his fowls to eat the bugs by throwing them down to them, like so much corn when they were hungry; and he thinks that if all chickens do not eat them, it is because their education has been neglected. The evidence, however, is so evenly balanced that we are unable to give any decided opinion, but we hope to see some experiments made and a definite conclusion attained.

We have now arrived at the end of our list of natural foes which at present we know to attack the Colorado Potato Beetle in its various stages of egg, larva, pupa and perfect beetle. The question will be very naturally asked, how in the face of all these varied enemies the beetle continues to propagate its countless swarms apparently with undiminished numbers?

In answer to this question, we avail ourselves of the excellent report of Mr. Le Baron, the State Entomologist, of Illinois. "The best answer I can give, is that no one of these many enemies, if we except, perhaps, the parasitic *Lydella*, is exclusively appropriated to these insects like the *Tachina*, of the Tussock Moth, or the *Chalcis* of the Bark Louse. In other words, these various enemies depredate upon the potato bugs, when they happen to come in their way, but do not depend upon them for their subsistence. Besides, the predaceous insects above enumerated do not belong to the prolific class, and therefore, are too few in numbers to make much headway against such a multitudinous host as the Colorado Potato Bugs. I have repeatedly walked through potato fields, with the express intention of taking note of their destroyers, without seeing any creature seriously deserving of the name. Nature, if left to her own resources, often exhibits wonderful curative and recuperative powers, which are ordinarily sufficient to preserve the balance between the world of insects, and that of plants. If in any case, like the present, she seems to fail, it is because we have abruptly disturbed the balance, by supplying these prolific insects with a superabundance of congenial food. And now that we are overrun by them we stand aghast at the consequences. But nature often accommodates her economy to human wants, and rectifies our errors and follies. And I have no doubt that the Colorado Potato Beetle, like other noxious insects that have been equally prevalent, will in time disappear, especially in those localities where it is now most abundant, even though we leave the work wholly to nature. But we must give her time. Nature works more slowly but more surely than man, and her judgments take the course of an inevitable retribution. If we can have more patience and get along with fewer potatoes for a year or two, I doubt not that the time of our redemption will draw nigh. But as we

do not know exactly when that time will come, and as patience without potatoes may seem to many, a tedious virtue, I opine there can be no sin in doing what we can to hasten the wished-for result."

A vast number of artificial remedies have been tried most of which, however, are utterly worthless. The only two practical and reliable ones are *hand picking*, and the use of *Paris Green*. In the summer of 1871, the attention of the Department of Agriculture, for Ontario, was called to the damage the Colorado Beetle was doing on the Western frontier. The Hon. John Carling, the energetic Minister of that Department, at once commissioned Mr. Wm. Saunders, and the writer of this report, to proceed to the West and thoroughly examine the district, and report to him as speedily as possible the result of their labours and also of all experiments they might make, so that the general public might have some reliable information. We accordingly made our investigation, and found that the beetle was to be seen in enormous numbers, and had been and still was doing a great deal of damage, in some cases destroying whole fields of potatoes. We made various experiments with different chemicals and mixtures, using *Arsenious Acid*, *Powdered Cobalt*, *Sulphate of Copper*, *Bichromate of Potash*, *Powdered Hellebore*, *Carbulate of Lime*, etc., but we found that the cheapest and most practical remedy was *PARIS GREEN*.

The many entomologists and agriculturists who have experimented on this insect, with various poisonous and other substances, in those portions of the United States where it has been so destructive for some years past, concur in recommending the use of *Paris Green*, diluted with flour, ashes, or air-slacked lime, as the best remedy known for destroying the insect, both in its larva and beetle state, without injuring the plant. The result of our experiments and investigations confirm this opinion, and this remedy is, no doubt, a reliable one, provided the *Paris Green* be of good quality. Our experience has also satisfied us that flour is a much better substance to mix with the green than either ashes or lime, as the insects eat it more readily, and, at the same time, it adheres more tenaciously to the surface of the plant, and hence is not so easily washed off by rain. We found good effects from a mixture of one part, by weight, of *Paris Green*, with 10 or 12 parts of flour, dusted lightly on the vines early in the morning, when the dew is on the foliage.

Where only a small patch is cultivated the mixture can be readily applied by means of an ordinary flour dredger; but when larger quantities are grown, we would suggest the use of a round tin box, about nine or ten inches in diameter, and four or five inches in depth, with a tightly fitting lid, and with a bottom either perforated with small holes, or covered with fine wire gauze. This should be attached, by means of a hollow handle, to a stick of any convenient length. With such an instrument, which may be obtained at a very trifling cost, a large piece of ground can be gone over in a short time, and the mixture applied almost as fast as the operator can walk.

QUANTITIES REQUIRED, AND PROBABLE COST PER ACRE.

After a careful estimate, we consider that three pounds of the *Paris Green*, mixed with its due proportion of flour (30 to 36 pounds), will, if economically used, be found sufficient for one acre of potatoes. Assuming 50 cents to be the ordinary retail price per pound of *Paris Green*, every application of the mixture would cost from two to three dollars per acre, exclusive of the labour. If the insect is very abundant, two or more applications may be required, as exposure to wind and rain will eventually remove the powder entirely from the leaves, rendering them liable to further attacks. Some discretion should be exercised in selecting a suitable time for using the mixture, which should not be applied during high winds, or immediately before a rain storm.

As this mixture is of a poisonous character, ordinary care should be used in handling it, to avoid inhaling much of the dust when applying it, to wash the hands after each applica-

NOTE.—Seeing the importance of taking immediate action in carrying out the suggestions made in the report of Messrs. Saunders and Reed, the Department of Agriculture has effected such arrangements with a wholesale drug house in the City of Toronto as will enable farmers and others to obtain a reliable quality of *Paris Green* there at 30 cents per pound. It will be put up in one pound packages, as suggested, with full directions for use, and may be purchased in quantities of not less than ten pounds, by remitting the amount of its cost to Messrs. Lyman Bros. & Co., of Toronto.

tion, to keep it out of the reach of children, and to exclude live stock of all kinds from fields where the poison is used. With these precautions no danger need be apprehended, it does not injure the leaves to any appreciable extent, unless very heavily applied, and cannot possibly affect the potato itself. We make these remarks because we have met with several individuals who entertain a foolish prejudice against the use of this mixture, for fear that it might injure the potatoes.

The use of Paris Green has also been strongly recommended, and we quote in its support from a recent article, by Mr. Riley, in the *American Entomologist*, addressed to "Our Canadian neighbours." "This substance has now become THE remedy for the Colorado potato beetle, and it is the best yet discovered. Having thoroughly tested it ourselves, and having seen it extensively used, we can freely say that, when applied judiciously, it is efficient and harmless. If used pure and too abundantly it will kill the vines as effectually as would the bugs, for it is nothing but arsenite of copper (often called *Scheele's green*, by druggists), and contains a varied proportion of arsenious acid according to its quality, often as much as 59 per cent., according to Brande and Taylor. But when used with six to twelve parts either of flour, ashes, plaster or slacked lime, it causes no serious injury to the foliage, and just as effectually kills the bugs. The varied success attending its use, as reported through our many agricultural papers, must be attributed to the difference in the quality of the drug. We hear many fears expressed that this poison may be washed into the soil, absorbed by the rootlets of the plant, and thus poison the tubers; but persons who entertain such fears forget that they themselves often apply to the ground, as nourishment for the vines, either animal, vegetable or mineral substances that are nauseous or even poisonous to us. Animal and vegetable substances, of whatever nature, must be essentially changed in character, and rendered harmless before they can be converted into healthy tubers, and a mineral poison could only do harm by being taken with the potatoes to the table. That any substance sprinkled either on the vines or on the ground would ever accompany to the table a vegetable which develops underground, and which is always well cooked before use, is rendered highly improbable. There can be no danger in the use of sound tubers. The poison may do harm, however, by being carelessly used, and it is most safely applied when attached to the end of a stick, several feet long, and should not be used where children are likely to play."

We learn also, that, at a recent horticultural meeting, in Missouri, of distinguished fruit-growers of that State and Illinois, the Entomologists of both these States being present, the conclusion of the whole matter was that Paris Green was the only practical antidote for the Colorado bug, and wheat flour the best vehicle in which to administer it.

Hand picking has been in Ontario until lately, the chief means employed in lessening the numbers of the beetle and, where perseveringly followed, has proved very successful, but it needs to be almost daily repeated, and is therefore exceedingly troublesome, and quite impracticable where a large quantity of potatoes are under cultivation. In gardens, however, and small patches a great deal may be done by watching the early growth of the potato vines, and carefully destroying as many as possible of the first beetles that make their appearance, before they get time to pair, and also keeping a keen eye to the deposit of the first eggs. The usual method is to knock the insect off the plant with a piece of shingle into a dish or small pail containing a little water, as they readily fall when struck, both larvæ and beetles may thus be collected in large numbers.

As many stories are current relating to the supposed poisonous character of the Colorado potato beetle, we have made it a special aim to obtain all the information possible on this head, and we are unable to find the slightest evidence, in this country at any rate, to sustain this popular belief, although we have conversed with many persons who had handled and destroyed many thousands of the insects in their different stages, and also handled them freely ourselves with impunity. We do not know of any insect belonging to the family *Chrysomelidae*, of which this beetle is a member, possessing poisonous properties, hence we deemed it highly improbable from the first that there was any truth in the stories so widely circulated, and which have created so much unnecessary alarm. There is, however, no necessity of using the hands or crushing the beetles therein, a piece of stick should be used, and answers far better for knocking off the beetles. In the State of Iowa a horse machine has been employed, which is worked between the rows and, by a revolving reel, knocks off the beetles and larvæ and throws them down between two rollers which effectually crush them. This, however, of course leaves the eggs undisturbed.

During the course of the investigation above alluded to, we frequently met with gardens and fields containing two or more kinds of potatoes, and observed that in many instances one sort was very much more affected by the insects than the other. The *Meshannock* is particularly liable to attack, while the Early Rose and Peach Blow are less so; but where the latter are the only varieties planted, the insects do not hesitate to devour them. Mr. Riley also states that "he has known several instances where Meshannocks, raised side by side with Peach Blows, have been entirely destroyed, while the latter were untouched." From the *North-Western Farmer* we also glean that "a potato grower, giving his experience with potatoes and bugs, names the White Rose, Peerless, White Peach Blow, Jersey Peach Blow, and the Buckeye, as the kinds least liable to be destroyed by the Colorado pest. He says that early planted potatoes escaped better than the same variety planted two or three weeks later. This is the universal experience, so far as we have heard."

We would strongly urge upon our farmers to plant their potatoes this year in such quantities only as they can well look after; one acre, carefully cultivated and watched over, will yield more gross results than four or five acres, if neglected. It is also desirable to isolate the potato patch as much as possible, and to avoid planting two years running in the same ground. Late ploughing or harrowing the ground, after removal of the crop, might also be beneficial in exposing the larvæ that have sought their winter quarters, and are then in the ground in their pupal state, to the rigours of our Canadian winter.

A suggestion has also been made that, as the beetle has a great preference for the egg-plant, which we have before shown is a member of the *Solanaceæ* family, it might be well to grow this plant on the outskirts of the potato patches, as a snare or decoy, to attract the beetles, and thus lead to their easier detection and destruction.

A peculiar feature in the history of the Colorado potato beetle, is the fact of its travelling from the West to the East, this being a remarkable exception to the ordinary rule that most noxious insects have invariably originated in the more densely populated and cultivated Eastern States, and have found their way thence gradually to the West.

We trust that the attention of our readers has been sufficiently awakened to the importance of exercising a strict vigilance over the course of this dreadful pest, for we can assure them on the authority of American sufferers that carelessness or negligence on their part will be sure to entail most serious consequences not on themselves only but also on their neighbours.

We give below for the benefit of our scientific readers a description of the larva of a Colorado Beetle, just after it has emerged from the egg. The notes were taken by Mr. Wm. Saunders, with the assistance of his beautiful microscope, and corroborated by the writer at the same time.

LENGTH $\frac{1}{2}$ of an inch, tapering posteriorly.

Head, very large, widest in front above, with a short projecting horn on each side, and covered with short black stiff looking hairs; colour, shiny black; mandibles black.

Body above, dull yellowish-orange, semi-transparent; 2nd segment with a black horny plate above, extending down the sides; 3rd segment, streaked with black down each side, the remaining segments dotted with brownish black tubercles, varying much in form and size, those along the sides near the under surface being largest and almost confluent, from each of these arises a single black hair or spine; terminal segments much smaller than the others and somewhat retractile, and furnished with two disks by which the larva is able to attach itself to any substance and to readily right itself when turned upside down.

Under surface very similar to the upper; legs black, each armed with a fine sharp curved claw by which the larva is enabled to adhere very tenaciously to any roughened surface.

3. THE STRIPED BLISTER BEETLE (*Epicauta vittata*, Fabr.)

Order—COLEOPTERA. Family—MELOIDÆ.

ATTACKING THE LEAVES ONLY OF THE POTATO.

This and the following beetle belong, as their name shows, to the same family as the famous Cantharides or Spanish flies, which are so much used for medicinal purposes, and which, in the South of Europe, form such an extensive article of commerce. Nearly all the beetles

of this family have the power of raising blisters when applied to the skin, a power which they retain even when dead and perfectly dry.

According to Dr. Harris, four of our native Cantharides have been thus successfully employed, and are found to be as powerful in their effects as the imported species.

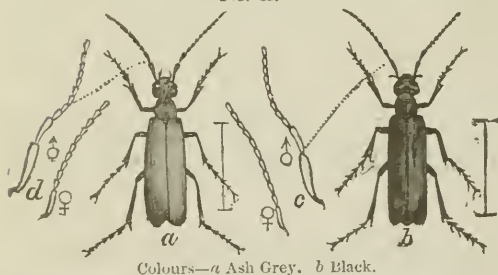
THE STRIPED BLISTER BEETLE (*Epicauta vittata*, Fabr.)—Fig. 81 is of a dull tawny yellow above, with two black spots on the head, and two black stripes on the thorax or throat, while the wing cases have two or three black stripes. The head is tolerably broad and heart-shaped, and is fastened to the thorax by a very narrow neck; the antennæ are long and tapering, the thorax is narrower than the wing cases. These latter are usually long and narrow, and are very soft and flexible. The legs are long and slender. The body is soft, and emits when handled, a yellowish fluid from the joints, which gives a disagreeable smell. When alarmed the insect feigns death. The under side of the body and legs are black, covered with a greyish down. It is one of the insects to which the production of the *potato rot* has been ascribed. Mr. Riley states that, in Missouri, this and other blister beetles were more numerous and injurious in 1868 than the dreaded Colorado potato beetle. He also stated that a gentleman living in Illinois discovered that this striped blister beetle eats all other potato tops in preference to Peach Blows.



4. THE ASH GREY BLISTER BEETLE, (*Epicauta cinerea*, Fabr.)

Same order and family as preceding.

THE ASH GREY BLISTER BEETLE.—Fig. 82, *a* is far more common in Canada. Its body is covered with a very short ash grey down. Its general appearance and history is similar to that of the striped blister beetle. When handled the gray down comes off like the bloom of a plum, and leaves the insect quite black. It attacks not only potato leaves, but also English or Windsor beans, and honey locusts, and, according to Mr. Riley, the foliage of the apple tree, and the young fruit are also liable to its attacks.



5. THE BLACK BLISTER BEETLE, (*Epicauta atrata*, Fabr.) is totally black, and is about half an inch in length. It may be found very plentiful in the month of August on the potato vines, and on the leaves and blossoms of the golden rods (*Solidago*.) Dr. Harris states that its ravages have often excited alarm.

Fig. 82, *b* gives a very good idea of the insect, although, in fact, the figure is that of *Epicauta murina*, a similar species, but not found in Ontario.

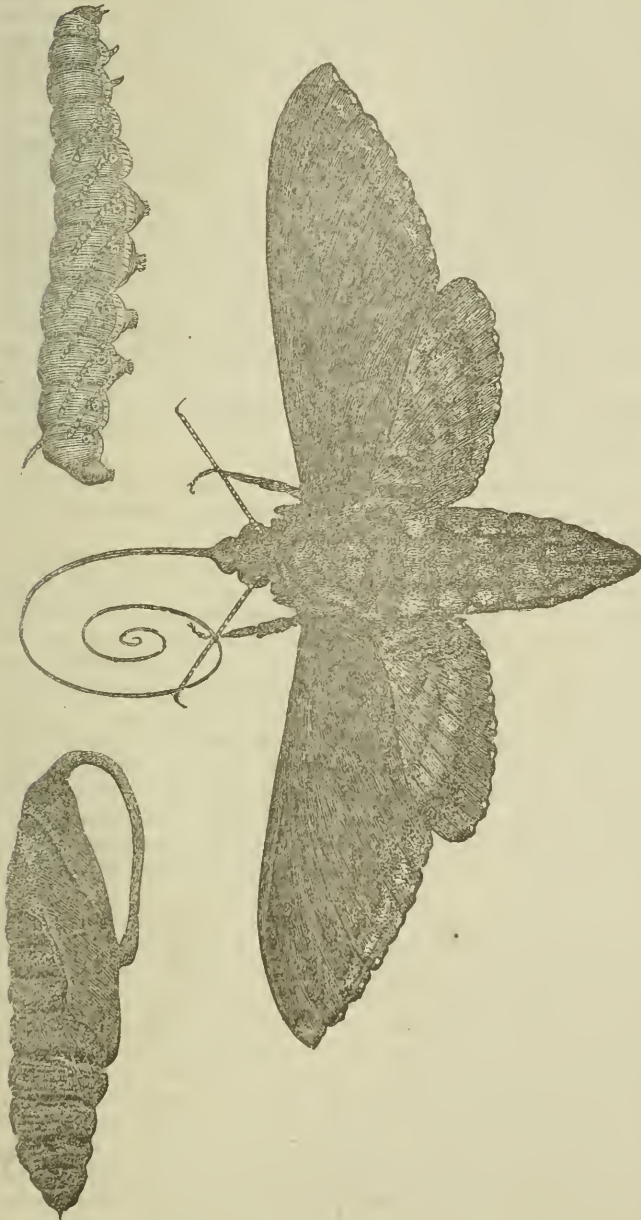
We are afraid that, on the whole, these Blister-beetles must be regarded and dealt with as enemies, although sometimes it may suit their purpose to feast upon the Colorado Beetle, and thus endeavour to earn the character of beneficial insects. These beetles may be knocked off the vines into a broad pan or pail of water, and destroyed, or driven into a windrow of hay or straw, and burnt; this latter plan Mr. Riley suggests as being the most practical and efficient remedy. As these insects are rather late in appearing, it would follow that the earlier planted potatoes would escape the best.

5.—THE POTATO OR TOMATO WORM, (*Macrosila quinque maculata*, Hawthorn.)

Order—LEPIDOPTERA. Family—SPHINGIDÆ.

EATING THE LEAVES IN THE LARVAL STATE.

FIG. 83.



This common and well-known insect belongs to a family of moths called *Sphingide* or "Hawk Moths," as they are more generally termed from their rapid mode of flight. The principal members of this family are large stout bodied moths with strong wide wings well adapted for swiftness. The larger ones are rarely seen during the day, but make their appearance at dusk or early evening, when they may be met with among the flower beds, darting about in search of food. The flight of one of these Hawk Moths has been so beautifully described by Mr. J. W. Douglas, the well-known English Entomologist, that we cannot refrain from quoting him: "Did you ever see a *Sphinx* fly? There is nothing to compare its motion to, except a flash of lightning. While you are looking at a flower in the twilight, between you and it glides a motion, a moving haziness, which is before you and yet conveys to your eye no definite image. Before you have half thought what it can be, you see the flower again distinctly, and rub your eyes, thinking there must have been some illusion, or possibly an unsteadiness of vision caused by the irritation of that gnat that was buzzing about your head; when, lo! the flower just beyond seems to shiver,—you move to see what is there, but there is a move before you, and a dim shadow flits away like a thought. Can it be anything real? Stand

still awhile; and now, in the increasing gloom, as you bend over the *Petunias*, holding your breath, you see a darkness visible drop down before you, but its presence is better made

known by the humming caused by the rapid vibration of wings. Stir not, or this aerial body will float away. Now you see it deigns not to alight or touch the margin of the chalice, but, poising itself in air, stretches out its long tubular tongue, and quaffs the nectar at the bottom." The potato sphinx may be found in almost all parts of Ontario. The larva has a preference for tomato plants, if they are convenient, but in their absence will content itself with the leaves of the potato, which as we have already seen is a member of the same botanical family as the tomato. It never appears in such numbers as to cause any very material damage, although the larva will often strip nearly all the leaves off a single vine in one night; yet, from its great size and conspicuous form, we deem this insect worthy of notice, the more especially as we feel in duty bound to raise our protest against the absurd and malicious slanders that each recurring year sees brought against this much maligned and harmless caterpillar by ignorant persons and editorial wiseacres.

At Fig. 83 we give a representation of the larva or caterpillar, the pupa or chrysalis, and the perfect moth. The latter is a large insect measuring from five to five and a half inches across the wings. Its general colour is grayish, variegated with blackish streaks and bands, and on each side of the body are five round orange coloured spots surrounded with black, it is from these spots that the insect derives its English name of the "five spotted Sphinx." The whole moth is densely covered with hairs and scales which totally conceal the surface of the body from view. The head and thorax are very large, the eyes are especially remarkable for their size and prominence. The antennæ are long and thick, the extreme ends tapering into a sharp point which curves backwards. The tongue is some five or six inches long, and when the insect is at rest is kept coiled up between the two thick feelers or palpi.

The thorax has some peculiar black markings on it which remind one very much of the English Death's-Head Moth, indeed in some specimens we have seen, the markings bear a most striking similarity to the fancied death's head and cross bones.

The wings are long and narrow, the hind ones, according to Professor Fitch, being twice, and the forward ones thrice as long as broad. When in repose, the wings remain close to the body, but slanting at somewhat sharp angles, like a house-roof.

The larva (see fig. 83) is a well known object; not a summer passes but the papers abound in most exaggerated stories, about "DEATH in the Tomato patch," "another victim POISONED by the Tomato worm," etc., and accusing this harmless caterpillar of all sorts of imaginary misdemeanors. It is almost needless for us to inform our readers that the larva is utterly incapable of voluntarily causing any harm; feeding as it does exclusively on soft leaves of the potato or tomato, its jaws, large as they appear, are fitted only for masticating its food, and are not at all adapted for use on a hard material, we repeat again that it would be impossible for the larva to inflict a wound with its jaws; if the hand was pricked by the spike on the anal segment of the body, it might pierce the flesh, but so might a pin or any sharp point, and we are satisfied no real wound could be caused by the horn. We have bred many specimens of this caterpillar, and have captured and handled them in all stages of their growth and are therefore perfectly satisfied that the insect is harmless, apart from the fact that our knowledge of their history and the formation and component parts of their body plainly corroborate our belief.

Professor Asa Fitch has well described this larva. It grows, he says, to the thickness of one's little finger, and is somewhat over three inches in length, or three and a half inches when crawling, it being then more elongated than when at rest. Its surface is destitute of hairs or bristles. It is divided into thirteen segments, those at each end being shorter and less distinct, the surface of each segment of the body is crossed transversely by impressed lines and elevated spaces giving them a ribbed appearance. In viewing this larva the eye first of all notices a formidable looking stout thorn-like horn placed at the hind end of the back, and projecting obliquely upward and backward, slightly curved and its surface rough from little projecting points. Low down on each side is a row of large oval dots which are the spiracles or breathing pores. The head is green, small, horny and shining with a black stripe on each side. The larva has three pair of small tapering feet placed anteriorly upon the breast, each having a sharp hook at its end, and four pairs of short, thick, fleshy pro-legs along the underside of the body with two similar ones at the tip. The colour of this worm is commonly bright green marked with white, along each side are seven straight oblique greenish yellow stripes, the last one of which is prolonged more or less distinctly to the base

of the curved horn. The body is dotted with numerous greenish or yellowish white spots. This larva is liable to vary in its colours to a surprising extent. Many persons from noticing in their gardens or fields worms which are so totally dissimilar in their colours, imagine that there are two or three distinct species attacking their potatoes. The common colour is leek green; from this it varies to a lighter yellowish green, and on the other hand to various shades of darker brownish and blackish green. In other instances the green wholly vanishes and the worm is pale or deep amber brown, blackish brown, purplish black or pure black. In these brown and black varieties the head sometimes retains its normal green colour. The curved horn is, however, uniformly black. The larva grows rapidly and is a most voracious feeder, they usually reach their maturity during July and August. Their presence on the vines is generally first indicated to us by the large pellets of excrement which it drops, some of which frequently lodge in the forks of the stalks or adhere to the leaves. When fully matured the larva leaves the vines and buries itself in the ground, generally at the depth of several inches. Here it undergoes its transformation into the pupa or chrysalis form. This latter, see fig. 83, is of a bright, glossy, chestnut colour, and is particularly noticeable from its head or forward end being bent over and prolonged until it touches and firmly adheres to the breast, forming a loop somewhat after the fashion of the handle of a pitcher. This loop is merely the sheath of the tongue, whose length we have before alluded to. The pupa stays underground until the succeeding summer when being by the warmth of the sun fully matured the moth burst its pupa shell and forces its way upwards, and having reached the surface finds some convenient plant where it clings and remains until its wings are fully developed, and the twilight arouses it to fly in search of food. In the Southern States the tobacco suffers much from a very similar insect to the one we have just described. For both insects hand picking is the best remedy. The larva is particularly subject to the attacks of a small Ichneumon fly which helps to keep these insects in check.

INSECTS AFFECTING THE CABBAGE.

BY THE REV. C. J. S. BETHUNE, M.A.

- | | |
|--|---|
| 1. The Rape Butterfly (<i>Pieris rapæ</i> , Linn). | 4. The Zebra Caterpillar (<i>Mamestra picta</i> , Harris). |
| 2. The Potherb Butterfly (<i>Pieris oleracea</i> , Harris). | 5. The Cabbage Plusia (<i>Plusia brassicæ</i> , Riley). |
| 3. The Southern Cabbage Butterfly (<i>Pieris protodice</i> , Boisdu). | 6. The Harlequin Cabbage-bug (<i>Strachia histrionica</i> , Hahn). |

1. THE RAPE BUTTERFLY (*Pieris rapæ*, Linn.).

LEPIDOPTERA—PIERIDÆ.

Though a considerable number of insects have long been known to affect the cabbage in this country, and have at times proved destructive in their ravages, yet it is only during the last few years that much alarm has been felt respecting their attacks, or that general attention has been directed towards them. This recent change in the amount of regard paid to cabbage insects has been occasioned by the arrival upon our shores of a European butterfly, whose ravages have long been a source of loss and annoyance to the gardeners of the mother land.

This new pest—the Rape Butterfly (*Pieris rapæ*)—was first observed by Mr. W. Couper at Quebec, in the year 1859; it had then, probably, been two or three years in the country. In 1863 Mr. G. J. Bowles, of Quebec, captured large numbers of specimens in the neighbourhood of that city, and the following year published an account of the occurrence of the insect in the *Canadian Naturalist and Geologist* (vol. i, new series, Aug. 1864, p. 258). Since then the new comer has increased and multiplied to a marvellous extent, spreading throughout the whole of the Province of Quebec, invading the eastern portion of Ontario, and extending into the neighbouring States and Provinces as far south as New Jersey. Everywhere it has proved excessively destructive to the cabbage crops, especially where they are cultivated in large quantities by market-gardeners, in the neighbourhood of cities and towns. So great, indeed, have been its ravages, that the Abbé Provancher, editor of *Le Naturaliste Canadien*,—an excellent magazine of natural history, published at Quebec,—has stated that it annually destroys more than \$240,000 worth of cabbages in and about that city. This is probably an over-estimate; yet even a fourth of the amount would be a very serious tax upon the gardening community of a single neighbourhood.

How this insect made its way across the Atlantic in safety, no one can positively say; but it may be reasonably conjectured that its eggs or larvæ were in some refuse cabbages or turnips thrown from an ocean steamship upon her arrival at Quebec, and that a supply of food chanced to be at hand for their sustenance. Once established, the species would soon spread, as it is very prolific, and its food is almost everywhere to be had in abundance. It feeds upon not only the leaves of different kinds of cabbages and cauliflower, but also upon those of turnips, nasturtium, mignonette, stocks, &c.

FIG. 84.



The Rape Butterfly is a pretty black and white creature, measuring about two inches across its expanded wings. The male (Fig. 84) has only one black spot near the middle of each fore-wing, and a black dash at the tip; while the female (Fig. 85) has two black spots, and a similar black dash

FIG. 85.



at the tip of the fore-wings; both sexes have a black spot on the front margin of the hind wings. Occasionally specimens of the male are taken, of a pale yellow colour instead of white.

The butterfly, which emerges from the pupa state in early spring, lays its eggs shortly after its appearance, singly on the under-side of the leaves of the food-plant. From these are soon hatched out the larvæ,—tiny green caterpillars, which eat voraciously, and grow rapidly till they attain to a length of about an inch and a half. When full grown they are of a pale green colour, finely dotted with black, and have a yellowish stripe down the back, and another

FIG. 86.



along each side (Fig. 86, a). Unlike the larvæ of several other species, this caterpillar attacks not only the comparatively worthless outer leaves, but bores down into the very heart of the plant, and thus renders the cabbages quite unfit for food. When ready to assume the pupa state, the creature leaves the plant upon which it has been feeding, and crawls away in search of some sheltered spot, such as the underside of a stone or plank, or projection of a fence or building. Here it suspends itself, with a silken girth around the middle, and a knot of silk at the tail, and turns into a yellowish or pale green chrysalis, speckled with black (Fig. 86, b). In this condition it remains for about a week, and then emerges as a perfect winged butterfly. A fresh batch of eggs is then laid, more caterpillars appear, and so the round of existence goes on. There are at least two broods in the year, and probably more; the last brood of the season spends the winter in the chrysalis state.

The remedies that may be employed for the purpose of keeping this pest in check, are very few in number, and by no means effectual. Paris green, that is employed with so much success against the Colorado Potato Beetle, and white hellebore, the specific for the Currant-worms, will destroy the Rape Caterpillars also, but with the decided disadvantage that the poison is sure to get inside the leaves of the cabbage-head, and to render the vegetable unfit for food. No one, certainly, would like to get rid of the caterpillars by providing "death in the pot" for himself and his family. There are other substances, however, such as the various compounds of cresylic acid, which are free from poisonous qualities, that may be used with advantage. The numbers of the foe may be further checked by catching and killing the butterflies as soon as they issue from the chrysalis, and before they lay their eggs for another brood. The chrysalis, also, should be searched for and destroyed. This is probably all that can be done in the way of artificial remedies.

When we can do so little ourselves to get rid of a pest, we turn anxiously to nature for a remedy. In Europe several parasites have long been known to attack this insect, and to keep it somewhat within bounds, but on this side of the Atlantic they were looked for by entomologist and gardener in vain. Very lately, however, the hoped-for friend made his appearance, in the shape of a tiny ichneumon—the *Pteromalus puparum*, of Linnæus—which has been observed in Vermont, at Boston, Mass., and Albany, N. Y. The credit of its first discovery in America is to be ascribed, we believe, to a young lad, son of a well known entomologist, Mr. P. S. Sprague, of Boston, Mass. He gathered, his father wrote us, about fifty chrysalids, every one of which was infested, as many as forty specimens of the parasite coming from a single one. This friendly insect is a tiny four-winged fly, about one-eighth of an inch long, with a golden-coloured body, and, in some cases, a brilliant green head. The female walks over the chrysalis, feeling with her antennæ for a suitable place for the insertion of her ovipositor, and when found, she drills a hole through which to lay her eggs; the process oc-

cupies about a minute on an average. From the eggs soon emerge little maggots, which prey upon the substance of the chrysalis, and finally completely devour it. We may confidently expect now that the destructive powers of the Rape Caterpillar will soon be so much curtailed by this parasite that it will cease to be much dreaded by the growers of cabbage and cauliflower.

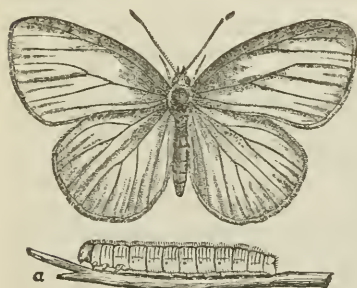
2. THE POTHERB BUTTERFLY (*Pieris oleracea*, Harris; *casta*, Kirby).

LEPIDOPTERA—PIERIDÆ.

Long before it was even imagined that the preceding destructive species would ever trouble us in this country, another member of the same genus of butterflies, the Potherb Pieris (*P. oleracea*, Harris), was known to Canadian entomologists as feeding upon the cabbage and other kindred plants. Though a native of this country, with plenty of its proper food within reach at all times, it is not at all an abundant species, and is not likely ever to prove a serious pest to the gardener. It is essentially a northern insect, seldom being found as far south as Pennsylvania, nor commonly anywhere in the United States south of Lake Ontario. It has been found in the Dominion, however, as far east as Nova Scotia, and west on Lake Superior; it has also been captured at Great Slave Lake in the far north-west. We have taken it ourselves occasionally, but rarely, at Cobourg, on Lake Ontario; on the shores of Lake Simcoe we have observed it in considerable numbers; at Collingwood, on Georgian Bay, both last summer and the previous one, we found it quite common; and we captured plenty of specimens of it at Sault Ste. Marie, and other points on Lake Huron.

This species may be at once distinguished from all our other butterflies by its pure white wings, free from all spots or markings on the upper surface; the under-side is also white, though occasionally tinged with yellow, and has the nervules more or less strongly marked with black scales. Some specimens are so entirely pure white, that they were considered by Kirby to be a distinct species, which he accordingly named *P. casta*; but there is now no doubt that his specimens were merely a variety of *P. oleracea*, which was first described by Dr. Harris in 1829. The wings of the insect expand about two inches; its legs and body are black.

FIG. S7.



The annexed illustration (Fig. S7) represents the butterfly and the caterpillar (a). The latter is pale green, very minutely sprinkled with darker dots, and with a darker line along the back. When full grown, it measures about an inch and a quarter. From its colour it is not easily detected when feeding, being readily mistaken for one of the ribs of the leaf. When ready to assume the pupa state (Fig. S8), it leaves its food-plant, and crawls away to some retired spot; it suspends itself by the tail and a silken girth round the middle, in the same manner as the preceding species. The

FIG. S8.



chrysalis is pale green or white, regularly and minutely spotted with black. In this condition it remains about ten days in summer, and then comes out as a butterfly; the autumn brood, however, remains in the pupa state all winter, there being two broods of caterpillars in each year. The original food-plant of the insect is unknown; it feeds, however, quite freely upon the leaves of cabbage, turnip, radish, mustard, and other plants of the same family.

As this species is so little troublesome, it is unnecessary to suggest any remedy. There is little doubt that its numbers are kept in check by some insect parasite.

3. THE SOUTHERN CABBAGE BUTTERFLY (*Pieris protodice*, Boisd.)

LEPIDOPTERA—PIERIDÆ.

Besides the two species already described, we have yet another butterfly in Canada whose caterpillars feed upon the leaves of the cabbage and other kindred plants. It belongs to the

same family and genus as the others, and resembles them in being a white insect with black markings. It is termed the Southern Cabbage Butterfly (*Pieris protodice*, Boisd.), because of its abundance and destructive powers in the more Southern States, while it is but seldom met with in the North. In this Province we sometimes capture specimens, but they are so rare that we look upon them as prizes, and eagerly add them to our collections.

The accompanying illustrations so well represent the insect in all its stages, that we need

FIG. 89.

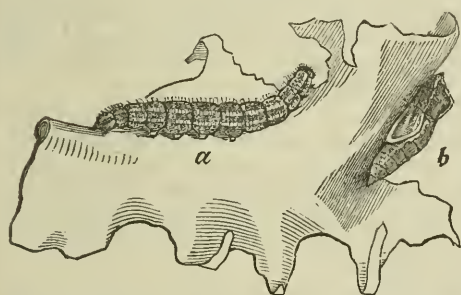


FIG. 90.



add but little by way of description. The colours of the butterflies, as above stated, are white and black. The male (Fig. 89) has but few black spots, while the female (Fig. 90) is very much darker from numerous black spots and markings.

FIG. 91.



The chrysalis (Fig. 91, *b*), is of a light bluish-grey or green colour, speckled with black, and with its projecting parts edged with pale yellow or flesh-colour. The caterpillar (Fig. 91, *a*), varies in colour from deep indigo or purplish blue to pale blue and green. It has four longitudinal yellow stripes, and is covered with black dots. Like the other species, there are two broods in the year.

Though so rare, as we have stated, in Canada, it is yet frequently very destructive to the south of us. According to Mr. Riley, "it is the common white butterfly of Missouri, abounding in many parts of the State, and sometimes fitting so thickly around the truck gardens near large cities, as to remind one at a distance of the falling of snow. It often proves exceedingly injurious, and I learn from a Mississippi exchange that 'there were last year thousands of dollars' worth of cabbages devastated and ruined by worms in the neighbourhood of Corinth.' I have often passed through cabbage-beds near St. Louis, and been unable to find a single perfect head, though few of the gardeners had any suspicion that the gay butterflies, which fitted so lazily from one plant to another, were the real parents of the mischievous worms which so riddled the leaves."

Mr. Scudder, of the Boston Society of Natural History, states that "this butterfly enjoys a wide geographical range, extending from Texas, on the south-west, Missouri on the west, and the mouth of the Red River of the North, on the north-west, as far as Connecticut and the Southern Atlantic States on the east."

4. THE ZEBRA CATERPILLAR (*Mamestra picta*, Harris.)

LEPIDOPTERA—APAMIDÆ.

Some of our readers have probably noticed upon their cabbages a very singularly marked, and, if they will acknowledge such a thing possible, beautiful caterpillar. It feeds openly upon the leaves, but when disturbed and rendered apprehensive of danger, it coils itself up

Fig. 92.



and drops to the ground. When full grown (Fig. 92, *a*), it is about two inches long, of a velvety black colour, with a red head and legs, and two yellow stripes along each side; between these stripes are numerous irregular cross lines of yellow, which are so striking as to have caused Dr. Melsheimer to give the creature the name of the Zebra Caterpillar (*Mamestra picta*). It feeds not only upon cabbage and cauliflower, but also upon spinach, beets, lettuce, and other garden vegetables. It is probable that in this country, as well as in the United States, there are two broods in the year. We have found the moth at different times during the summer, and the caterpillars we have taken on cabbages as late as the first week in October; in this case it very soon turned into the pupa state,

and remained in this condition till the following spring, when the perfect insect issued from the cocoon.

When changing to a chrysalis, it enters the ground, and forms a rough cocoon of particles of earth, united by silken threads; inside this the dark shiny brown chrysalis remains, hidden from view and sheltered from danger. The moth (Fig. 92, *b*), comes forth in early summer, and is quite a disappointing creature to those who have reared the gay, handsome caterpillar in expectation of something even more gorgeous in the winged state. It is not without beauty, however, though its colours are dull and inconspicuous; its forewings are deep brown, shaded with purple, and marked with paler spots in the middle, as shewn in the figure. The hind wings are white, faintly edged with brown on the outer margin. The moth belongs to the nocturnal Lepidoptera, and is rarely seen except by collectors.

In the latitude of St. Louis, Mo., Mr. Riley states that "there are two broods of this insect each year, the second brood of worms appearing from the middle of August along into October." He adds that he has noticed "that the spring brood confines itself more especially to young cruciferous plants, such as cabbages, beets, spinach, etc., but that the fall brood collects in hundreds on the heads and flower-buds of asters, on the snow-berry, on different kinds of honey-suckle, on mignonette, and on asparagus; they are also said to occur on the flowers of clover, and are quite partial to the common lamb's quarter."

These caterpillars are so bright and conspicuous that they can be easily detected on the plants, and destroyed by treading under foot. When quite young they herd together, and may be put an end to with ease; later on, they scatter and feed singly.

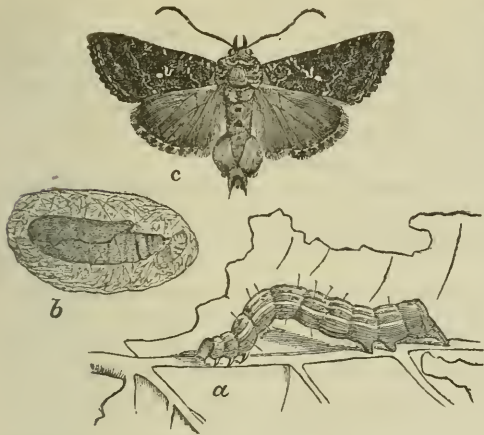
5. THE CABBAGE PLUSIA (*Plusia brassicae*, Riley.)

LEPIDOPTERA—PLUSIDÆ.

In the State of Missouri, and probably in many other localities, there occurs on the cabbage a voracious and destructive caterpillar, which has been reared and described by Mr. Riley (2nd Missouri Report, page 110,) under the name of the Cabbage Plusia (*P. brassicae*.) He gives the following account of it:—

"In the months of August and September the larva (Fig. 93 *a*) may be found quite abundant on the cabbage, gnawing large, irregular holes in the leaves. It is a pale green, translucent worm, marked longitudinally with still paler more opaque lines, and, like all the known larvæ of the family to which it belongs, it has but two pair of abdominal prolegs, the two anterior segments, which are usually furnished with such legs in ordinary caterpillars, not having the slightest trace of any. Consequently, they have to loop the body, as represented in the figure, and are true 'span-worms.' Their bodies are very soft and tender, and as they live exposed on the outside of the plants, and often rest motionless, with the body arched, for hours at a time, they are espied and devoured by many of their enemies, such as birds, toads,

FIG. 93.



bristles, by the aid of which it is enabled to cling to its cocoon.

"The moth is of a dark smoky-gray, inclining to brown, variegated with light grayish-brown, and marked in the middle of each front wing with a small oval spot and a somewhat U-shaped silvery white mark, as in the figure. The male (Fig. 10 c) is easily distinguished from the female by the large tuft of golden hairs, covering a few black ones, which springs from each side of his abdomen towards the tip."

Mr. Riley recommends drenching with a cresylic wash as an effectual remedy for this insect. We have not met with the species in Canada, but have thought it as well to give Mr. Riley's account of it to our readers.

6. THE HARLEQUIN CABBAGE-BUG (*Strachia Histrionica*, Hahn.)

HEMIPTERA—SCUTELLERIDÆ.

Though several of the cabbage insects that we have already described are bad enough as regards their destructive powers, the creature that we have now come to is said to exceed them all in its noxious qualities. Happily, it is a southern insect, and is not likely to trouble us very much in this Province. It is called the Harlequin Cabbage-Bug (*Strachia histrionica*, Hahn) from the gay appearance it presents with its bright black and yellow colours.

Dr. Linneecum, of Texas, has thus described its operations in the *Practical Entomologist* (vol. I., page 110):—

"The year before last (1865) they got into my garden, and utterly destroyed my cabbage, radishes, mustard, seed turnips, and every other cruciform plant. Last year I did not set any of that order of plants in my garden. But the present year, thinking they had probably left the premises, I planted my garden with radishes, mustard, and a variety of cabbages. By the first of April the mustard and radishes were large enough for use, and I discovered that the insect had commenced on them. I began picking them off by hand and tramping them under foot. By that means I have preserved my 434 cabbages, but I have visited every one of them daily now for four months, finding on them from thirty-five to sixty full-grown insects every day, some coupled and some in the act of depositing their eggs. Although many have been hatched in my garden the present season, I have suffered none to come to maturity; and the daily supplies of grown insects that I have been blessed with are immigrants from some other garden.

FIG. 94.



"The perfect insect [Fig. 94 represents it with wings closed; fig. 95 with wings expanded.] lives through the winter, and is ready to deposit its eggs as early as the 15th of March, or sooner, if it finds any cruciform plant large enough. They set their eggs on end in two rows, cemented together, mostly on the underside of the leaf, and generally from eleven to twelve in number. In about six days in April—four days in July—there hatches out from these eggs a brood of

FIG. 95.



larvæ resembling the perfect insect, except in having no wings. This brood immediately begins the work of destruction by piercing and sucking the life-sap from the leaves; and in twelve days they have matured. They are timid, and will run off and hide behind the first leaf-stem, or any part of the plant that will answer the purpose. The leaf that they puncture immediately wilts, like the effects of poison, and soon withers. Half a dozen grown insects will kill a cabbage in a day. They continue through the summer, and sufficient perfect insects survive the winter to insure a full crop of them for the coming season.

"This tribe of insects do not seem liable to the attacks of any of the cannibal races, either in the egg state or at any other stage. Our birds pay no attention to them, neither will the domestic fowls touch them. I have, as yet, found no way to get clear of them, but to pick them off by hand."

Besides the foregoing insects, to which our cabbages are more or less exposed, there are others which attack them at various stages of their growth. The Turnip Flea-beetle (*Haltica striolulata*), for instance, attacks the seed-leaves of the plant almost as soon as they are out of the ground; when a fair size and planted out in the beds they are intended to occupy, cabbages are very frequently cut off in the night by various species of cut-worms (*Agrotis*); later on they are attacked at the root by wire-worms (*Eluter*), and maggots (*Anthomyia brassicæ*); and on the leaves by plant-lice (*Aphides*), and the various caterpillars we have already enumerated. Taken altogether, we may be inclined to feel the same surprise that any of them ever grow up and attain to maturity, as some timorous old maids do with regard to mischief-loving, heedless boys! However, they do escape in sufficient numbers apparently to satisfy the requirements of the human race, and we may well "eat and be thankful."

INSECTS ATTACKING THE CUCUMBER, MELON, PUMPKIN AND SQUASH.

By E. B. REED, LONDON ONT.

- | | |
|--|--|
| 1. The Squash-vine Borer (<i>Aegeria Cucurbitæ</i> , Harris.) | 3. The Striped Cucumber Beetle (<i>Diabrotica vittata</i> , Olivier.) |
| 2. The Squash Bug (<i>Coreus tristis</i> , De Geer.) | 4. The Cucumber Flea Beetle (<i>Haltica cucumeris</i> , Harris.) |

The plants above named, whose insect enemies we are about to describe, belong to a family known in Botany as the *Cucurbitaceæ* or Gourd family. It does not include in its limits a very large number of genera, but most of them being familiar to us in garden, or field, we trust that our readers will not object to learn some few facts regarding the natural history of the various insects that more commonly affect the growth of these vines, which, to almost every person in this country at any rate, are, in their respective seasons an object of interest, whether it be the pretty little *Mock-orange* ornamenting, with its climbing tendrils and bright-coloured fruit, our arbours and cottage walls; the esculent *Cucumber*, that mysterious emblem of coolness, but rightly surnamed the "Nemesis of vegetables"; the fragrant and delicious *Melon*; the thirst-assuaging *Water-melon*; the gigantic *Pumpkin*; or the mammoth *Squash*, the pride of the agriculturist and source of much joy and comfort to his cattle.

1. THE SQUASH-VINE BORER (*Aegeria Cucurbitæ*, Harris.)

Order, LEPIDOPTERA; family, ÆGERIADÆ.

The Ægerians, or "Clear-wings" as they are popularly termed, are a very curious tribe of moths. The greater part of their wings is devoid of scales, and is as transparent as the membranous wings of a bee or a fly. They are still futher remarkable for their extraordinary resemblance to insects of other orders—bees, wasps, hornets, etc. They are true lovers of flowers and sunshine, and flying only in the day-time they may frequently be seen reposing on some leaf enjoying the warmth of the sun's rays and expanding and contracting the curious little brush or fan of hairs at the end of their body. Their habits in the larval state are quite different from those of the Sphingidæ, the latter, as we have seen in the Potato and Plum Sphinges, living exposed upon the leaves of their food-plants, while the caterpillars of the Ægerians conceal themselves in the stems or roots of plants, and feed on the wood or pith.

During the summer our Squash and other similar vines often seem troubled with some disease which kills the plant. A little examination discloses the presence of a small borer, which has commenced its operations in the larval state, and has eaten out the interior of the stem close to

FIG 96.



the ground. This is the larva of the Squash-vine borer (*Aegeria Cucurbitæ*) Fig. 96. The full grown larva is about an inch in length. It is fleshy, soft and of a transparent whitish colour, tapering at each extremity. The head is retractile, small, and of a brown colour. The larva

has more the appearance of a maggot than a true caterpillar, the prolegs being wanting; but their loss is replaced by double rows of hooks beneath each segment, which enable the larva to proceed up and down its tunnels in the pith of the plant with the greatest ease and facility.

When fully matured the larva leaves the plant and seeks shelter beneath the earth, where

it forms an oblong oval cocoon of a gummy substance, covered with particles of earth and portions of the stalks of the vines, and here awaits transformation into a chrysalid. Fig. 97 gives a representation of one of these cocoons with the chrysalid inside it. According to Dr. Harris, the chrysalid is of a shining bay colour, and the edges of the abdominal segments are armed with transverse rows of short teeth. By means of these little teeth, the chrysalid just before it is about to be transformed to a winged insect, works its way out of the cocoon and the shell of the chrysalis is left half emerging from the orifice after the moth has escaped from it.

FIG 97.



FIG 98.



The perfect moth (Fig. 98) is a very pretty object. Its body, which is about half-an-inch in length, is orange coloured or tawny, with four or five black dorsal spots. The forewings are opaque olive brown, and expand about one inch and a quarter. The hind wings are quite transparent, except the margins. The hind legs are densely fringed with long orange-coloured and black hairs. The moth deposits its eggs on the vines, close to the roots. It should be caught and destroyed whenever practicable. Search should also be made for the eggs or when any plant appears to droop, the larva should be sought for, and, if possible, killed.

2. THE SQUASH BUG (*Coreus tristis*, De Geer).

Order, HEMIPTERA; Family, CORISÆ.

FIG. 99.



This common and well known insect is very destructive to squashes. Its habits have been so well described by the late Dr. T. D. Harris, that for the benefit of our Canadian agriculturists we have quoted him at some length. Fig. 99 represents the insect.

About the last of October squash-bugs desert the plants upon which they have lived during the summer, and conceal themselves in crevices of walls and fences, and other places of security, where they pass the winter in a torpid state. On the return of warm weather, they issue from their winter quarters, and when the vines of the squash have put forth a few rough leaves, the bugs meet beneath their shelter, pair, and immediately afterwards begin to lay their eggs. This usually happens about the last of June or the beginning of July, at which time, by carefully examining the vines, we shall find the insects on the ground, or on the stems of the vines close to the ground, from which they are hardly to be distinguished on account of their dusky colour. This is the place where they generally remain during the daytime, apparently to escape observation; but at night they leave the ground, get beneath the leaves, and lay their eggs in little patches, fastening them with a gummy substance to the under-side of the leaves. The eggs are round, and flattened on two sides, and are soon hatched. The young bugs are proportionally shorter and more rounded than the perfect insects, are of a pale ash colour, and have quite large antennæ, the joints of which are somewhat flattened. As they grow older and increase in size, after moulting their skins a few times, they become more oval in form, and the under-side of their bodies gradually acquires a dull ochre-yellow colour. They live together at first in little swarms or families beneath the leaves upon which they were hatched, and which, in consequence of the numerous punctures of the insects, and the quantity of sap imbibed by them, soon wither, and eventually become brown, dry and wrinkled, when the insects leave them for fresh leaves, which they exhaust in the same way.

As the eggs are not all laid at one time, so the bugs are hatched in successive broods, and consequently will be found in various stages of growth through the summer. They, however, attain their full size, pass through their last transformation, and appear in their perfect state, or furnished with wing-covers and wings, during the months of September and October. In this last state the squash-bug measures six-tenths of an inch in length. It is of a rusty black colour above, and of a dirty ochre-yellow colour beneath, and the sharp lateral edges of the abdomen, which project beyond the closed wing-covers, are spotted with ochre-yellow. The thin over-lapping portion of the wing cover is black, the wings are transparent, but are dusky at their tips, and the upper side of the abdomen, upon which the wings rest when not in use, is of a deep black colour, and velvety appearance. On the back part of the head of this bug, and rather behind the eyes, are two little glassy elevated spots, which

are called eyelets, and which are supposed to enable the insect to see distant objects above it, while the larger eyes at the sides of the head are for nearer objects around it. When handled, and still more when crushed, the squash-bug gives out an odour precisely similar to that of an over-ripe pear, but far too powerful to be agreeable. In order to prevent the ravages of these insects, they should be sought and killed when they are about to lay their eggs; and if any escape our observation at this time, their eggs may be easily found and crushed. With this view, the squash vines must be visited daily during the early part of their growth, and must be carefully examined for the bugs and their eggs. A very short time spent in this way every day, in the proper season, will save a good deal of vexation and disappointment afterwards. If this precaution be neglected or deferred until the vines have begun to spread, it will be exceedingly difficult to exterminate the insects, on account of their numbers; and if at this time dry weather should prevail, the vines will suffer so much from the bugs and the drought together as to produce but little if any fruit. Whatever contributes to bring forward the plants rapidly, and to promote the vigour and luxuriance of their foliage, renders them less liable to suffer by the exhausting punctures of the young bugs. Water drained from a cow-yard, and similar preparations, have been, with this intent, applied with benefit.

The pumpkin vines are also much affected by the squash-bug. Various remedies have been tried. For gardens and places adjacent to the house, the application of soap-suds has been tried with good effect. A very good plan is to leave chips or wilted leaves on the ground among the vines; the bugs retire under these after feeding at night, and may be gathered easily and destroyed in the daytime.

3. THE STRIPED CUCUMBER BEETLE (*Diabrotica vittata*, Olivier).

Order, COLEOPTERA; Family, CHRYSOMELIDÆ.

This beetle is very destructive to the cucumber, melon and squash, attacking the roots and boring the lower part of the stem in the larval or caterpillar state, while the perfect beetle feeds on the tender leaves of the young plants, and damages the buds and young shoots of later growth. It belongs to the leaf-eating beetles, like its congener, the 3-lined potato-beetle, whose history we have given in the earlier portion of this Report.

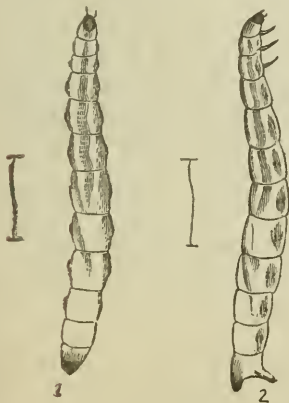
It is exceedingly common, both in Ontario and the United States; and in the latter country, Mr. C. V. Riley estimates that it destroys annually thousands of dollars' worth of cucurbitaceous vines.

Fig. 100.



Colours—Yellow and black spots. called, make their appearance very early in the season, as soon as the young seed-leaves of the vines are above-ground, and even penetrate the earth in search of the

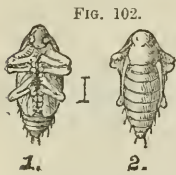
Fig. 101.



It is the only boring beetle that attacks these plants, and must not be confounded with a very similar insect of the same family, the 12-spotted *Diabrotica*, *Diabrotica 12-punctata*, Fabr (Fig. 100), which is often found feasting on the rind of melons, cucumbers and squashes.

The parent beetles of the "Striped Bug," as it is commonly called, make their appearance very early in the season, as soon as the young seed-leaves of the vines are above-ground, and even penetrate the earth in search of the sprouting seeds. After pairing, the female deposits her eggs near the roots of the vines. In due course of time these are hatched, and produce little whitish worms, which grow to about one-third of an inch in length, and as thick as a good sized pin. Their heads and last segment of the body are dark and horny. The annexed cut (fig. 101) gives a highly magnified view of these larvæ.—No. 1 shewing the back, and No. 2 the side views; the hair lines at the side give the true dimensions of the larvæ. Dr. Henry Shimer, who has thoroughly worked up the history of this pest, states "that in June and July the grub eats the bark, and often perforates and hollows out the lower portion of the stem, which is beneath the ground, and the upper portion of the root, and occasionally, when the supply below fails, we find them in the vine, just above the ground. The larva arrives at maturity in about a month after the egg is laid." When full grown, the larvæ descend into the earth, and form little cavities, where they transform into the pupal state. The pupa is rather less

than a fifth of an inch in length, of a whitish colour, and the extremity of the abdomen ending



in two longish spines. Fig. 102 represents the front and back view of the pupa enlarged. After remaining in this condition about a fortnight, the perfect beetle is matured, and after a short period works its way out of the cell, and seeks the light of day.



Colours—Yellow and black.

The beetle (fig. 103) is about one quarter of an inch long. Its colour is a bright yellow, with a black head and broad stripes of black on the wing covers. The underside of the abdomen and the feet are black. There are, at least, three successive broods in each year. The last brood hibernates in the pupal state. Dr. Shimer has found the larvæ boring in the muskmelon and squash vines as late as October 1st. Dr. Harris states "that great numbers of these little beetles may be obtained in the autumn from the flowers of squash and pumpkin vines, the pollen and germs of which they are very fond of. They get into the blossoms as soon as the latter are opened, and are often caught there by the twisting and closing of the top of the flower, and when they want to escape they are obliged to gnaw a hole through the side of their temporary prison."

Various means have been suggested to prevent the ravages of these beetles, but the best remedy both for this and the cucumber flea beetle is to cover the young vines with boxes open at the bottom and covered on the top with millinet. Such boxes can be obtained at a very low cost. Sprinkling the vines with Paris green and flour, as for the potato bug, is also recommended.

4. THE CUCUMBER FLEA BEETLE (*Halitica cucumeris*, Harris).

Same order and family as the preceding.

This is another member of the leaf-eating family of beetles, and derives its popular name of Flea Beetle from its active jumps, for which it is peculiarly fitted by the great size of the hind thighs. Fig. 104 shows the perfect insect, the hair line at the side giving the true size.



Dr. Harris, who originally described it, says, "that it is only one-sixteenth of an inch long, of a black colour, with clay yellow antennæ and legs, except the hindmost thighs, which are brown. The upper side of the body is covered with punctures which are arranged in rows on the wing cases; and there is a deep transverse furrow across the hinder part of the thorax." These beetles do not confine their attacks to the cucumbers and melons, but feed on various other plants, including, as we have seen, the potato.

The larvæ burrow into the leaves, and eat out the soft, juicy pulp under the skin, making winding passages through the centre of the leaf, and thus causing considerable damage. They are little, slender grubs, tapering at each end. The perfect beetles nibble little holes in the leaf, which become thus materially affected in proportion to the extent of the attack. In some of the Western States whole fields of potatoes are often very badly injured. The beetles conceal themselves during the winter in some dry sheltered spot, and make their appearance early in the spring. There are several broods of them during the season. Bearing as they do a close relationship to the English Turnip Flea Beetle *H. nemorum*, it has been suggested that watering the leaves with a solution of lime might have a good effect, as that remedy has long ago been employed in England with great benefit to the turnip crops. The larvæ are believed to go underground to enter the pupal state.

APPENDIX TO REPORT

OF THE

Commissioner of Agriculture and Arts.

APPENDIX (F).

ANALYSIS OF CROP RETURNS FOR THE YEAR 1871.

CROP RETURNS.

(Circular to Secretaries of Electoral Division Agricultural Societies.)

BUREAU OF AGRICULTURE AND ARTS, ONTARIO,

Toronto, August 31st, 1871.

SIR,—I have to request, in accordance with the practice of previous years, that you will furnish me with as accurate a Return as possible of the results of the Harvest in your Electoral Division, by filling up the accompanying Schedule. You will please insert what is considered to be a correct *average* per acre, stated in measure or weight, of the respective crops. The column for "Remarks" may be filled with brief statements of the varieties or kinds that are considered most hardy and prolific, and with any facts connected with, and throwing light on, the modes of cultivation.

In order that the information which I seek by means of this circular may be received in time for insertion in my Report to Parliament, I urgently request that you will not fail to make your return *by the 25th October, at the latest.*

I enclose several copies of this Schedule that, you may, if you deem it desirable, transmit them to your township societies, or to any persons interested in, and competent to give reliable information on, the subjects of this inquiry.

Any blank schedules which you may send out, should, after being filled up *be remitted to you*, (not to this department) in time for you to make up the Return for your Electoral Division, as before stated, since any information reaching me after the 25th October will not be available for my Report.

You will please sign and date your Return, and insert the name of the Electoral Division on the back of this circular.

Yours respectfully,

JOHN CARLING,
Commissioner.

SUBJECTS OF INQUIRY.

Average per acre and quality of produce of the following Crops:—Fall Wheat, Spring Wheat, Oats, Rye, Barley, Peas, Beans, Hay, Corn, Potatoes, Turnips, Carrots, Parsnips, Mangold Wurzel.

Please furnish any information available as to:—

1st. Insects injurious to Grains, Roots, and Fruits this season; 2nd. Flax culture, its extent and prospects; 3rd. Hop culture, its extent and prospects; 4th. Crops that may have been more or less cultivated this season than the average of late years; 5th. What has been the character of the season relative to the different kinds of Fruit.

ADDINGTON.

Fall Wheat.—Average 28 bushels per acre; quality good.

Spring Wheat.—Average 18 bushels per acre; quality poor.

Oats.—Average 40 bushels per acre, quality good.

Rye.—Average 15 bushels per acre.

Barley.—Average 36 bushels per acre; quality excellent.

Peas.—Average 20 bushels per acre; quality good.

Hay.—Average 1 ton per acre; well saved.

Corn.—Average 30 bushels per acre; quality indifferent.

Potatoes.—Average 170 bushels per acre; quality fair.

Turnips.—Yield indifferent; other root crops not much cultivated.

Wheat and Barley are extending in cultivation; Fife and Black Sea, principal varieties. Spring Wheat slightly affected by Midge, and also Potatoes by "The Bug," Garnet Chili, chiefly raised. *Flax*, only raised for the seed. *Hops*, raised in a few plantations, both yield and price this year quite encouraging. For several preceding years hop growing has been but an indifferent business.

BOTHWELL.

Fall Wheat.—30 bushels per acre; quality very good.

Spring Wheat.—20 bushels per acre; good, but not much raised.

Oats.—35 bushels; sample heavy.

Barley.—30 bushels; middling quality.

Peas.—25 bushels; injured by the bug.

Beans.—25 bushels; quality good.

Hay.—1½ ton; quality good.

Corn.—40 bushels; quality good.

Potatoes.—200 bushels; quality good.

Carrots.—400 bushels; quality good.

Mangolds.—400 bushels; quality good.

Turnips.—A good crop in a few places; but in others greatly injured by the fly.

Fall Wheat, the best crop for twenty years; some fields produced as much as 53 bushels per acre.

Insects not injurious, except to Peas:—Colorado Beetle appeared among potatoes in many places, but did comparatively little harm.

The season was not, on the whole, favourable to such fruits as the Apple, Peach, Cherry, and Plum.

BRANT, SOUTH.

Fall Wheat.—15½ bushels per acre; quality good.

Spring Wheat.—10 bushels per acre; quality good.

Oats.—30 bushels; quality good.

Rye.—10 bushels; not much cultivated.

Barley.—25½ bushels; good and bright.

Peas.—25 bushels; good and bright.

Corn.—15 bushels; crop very variable.

Beans.—20 bushels; not much grown.

Hay.—1½ ton; well saved.

Potatoes.—75 bushels; best quality.

Turnips.—450 bushels; good.

Carrots and Mangolds almost a total failure in consequence of the early and protracted drought. Mostly White Wheat cultivated, Soules and Diehl; Treadwell considered very hardy. No insects injurious to grain. The Potato Beetle made its appearance, but not extensively injurious. *Hops*, about 50 acres under cultivation, crop about 20 per cent. under an average. Apples much injured by the Codling Moth, and with small fruits, under an average. Pears good in quality and yield large.

BRUCE, NORTH.

Fall Wheat.—35 bushels per acre; quality excellent.

Spring Wheat.—25 bushels per acre; first class.

Oats.—35 bushels per acre; quality good.

Barley.—25 bushels per acre; excellent.

Peas.—30 bushels per acre; grain small in size.

Hay.—1½ ton per acre; well saved; injured by drought.

Potatoes.—50 bushels; tubers small.

Turnips and Carrots.—In some places pretty good; *Mangolds*, indifferent; *Fall Wheat* never, perhaps, equalled in yield and quality; but as it was a comparative failure last year, the area was unusually restricted this. The straw of spring crops generally was rather light, but the produce good. Injury from insects very trifling. *Fruit* generally escaped spring frosts, and was pretty fair, but the excessive dry weather diminished the yield considerably.

BRUCE, SOUTH.

Fall Wheat.—35 bushels per acre; quality good.

Spring Wheat.—20 bushels per acre; “

Oats.—40 bushels per acre; “

Barley.—25 bushels per acre; “

Peas.—25 bushels per acre; “

Hay.—1 ton per acre; “

Potatoes.—80 bushels per acre; “

Turnips.—400 bushels; middling.

Carrots and Mangolds were very inferior.

Turnips were injured by insects. *Apples* did well, but stone-fruit almost a failure.

CARDWELL.

Fall Wheat.—24 bushels per acre; sample good; crop much injured by frost.

Spring Wheat.—18 bushels; quality good.

Oats.—30 bushels; light in weight.

Barley.—25 bushels; very good sample.

Peas.—22 bushels; quality good.

Hay.—1 ton; excellent quality.

Potatoes.—100 bushels; quality very good.

Carrots.—300 bushels. *Turnips* good, but not much raised; the same as to *Mangolds*.

Fruit not very favourable. Insects affecting fruit, especially apples, have in some localities been very injurious.

CORNWALL.

Fall Wheat.—35 bushels per acre; good, but not much sown.

Spring Wheat.—25 bushels; quality good, but little injured by midge.

Oats.—40 bushels ; heavy sample.
Barley.—45 bushels ; good quality.
Peas.—20 bushels ; very good.
Hay.—2 tons ; good quality.
Corn.—30 bushels ; below an average quality.
Potatoes.—250 bushels ; quality good. Other roots very little cultivated.
Fruits.—Yield pretty fair, but apples were affected by the worm ; and Turnips and Cabbage suffered more or less from insects.

DUNDAS.

Fall Wheat.—36 bushels per acre ; quality good.
Spring Wheat.—25 bushels ; “
Oats.—45 bushels ; “
Barley.—40 bushels ; “
Peas.—20 bushels ; “
Hay.—2 tons. *Beans*—but little grown.
Corn.—25 bushels ; middling.
Potatoes.—200 bushels ; quality good.
 Other roots not cultivated as field crops ; but Mangolds are beginning to be so. *Hops*—Culture very restricted ; quantity and quality medium. Fall Wheat and some spring grains extending in cultivation. The season has been favourable to Apples, but Grapes and Plums were inferior.

DURHAM, EAST.

Fall Wheat.—30 bushels per acre ; quality very good.
Spring Wheat.—20 bushels ; good.
Oats.—35 bushels ; sample heavy.
Rye.—25 bushels ; good ; not much cultivated.
Barley.—35 bushels ; first-rate ; colour remarkably bright.
Peas.—30 bushels ; very good, and free from worms.
Beans.—25 bushels ; not much cultivated.
Hay.—1 ton ; well saved.
Corn.—25 bushels ; often used in a green state for stock.
Potatoes.—100 bushels ; good, and quite free from disease.
Turnips.—300 bushels ; small size.
Carrots.—300 bushels ; small.
Mangolds.—400 bushels ; quality good.
 Norway and Surprise Oats have yielded well ; midge almost disappeared. Grasshoppers in some places have been very destructive of grain and vegetables. Hop culture is almost abandoned. Fall Wheat, Barley and Turnips, a larger culture of ; Spring Wheat and Peas, less. *Fruit*.—Plums almost a failure ; small fruits pretty plentiful. Apples, owing to the very dry weather, were not so large as usual. Grapes, injured by spring frosts.

DURHAM, WEST.

Fall Wheat.—27 bushels per acre ; quality good.
Spring Wheat.—19 bushels ; “
Oats.—40 bushels ; “
Rye.—15 bushels ; “
Barley.—28 bushels ; “
Peas.—24 bushels ; “
Hay.—Crop very light ; “
Potatoes.—100 bushels ; “
Turnips.—500 bushels ; “
Carrots.—400 bushels ; “
Mangolds.—500 bushels ; “

Grasshoppers were injurious, particularly on poor lands. The area of Wheat culture has increased; that of Barley diminished. Plums and Cherries almost a failure; the Apple-worm has been injurious, otherwise the crop was pretty good.

ELGIN, EAST.

Full Wheat.—26 bushels per acre; quality very superior.

Spring Wheat.—20 bushels; samples very good.

Oats.—40 bushels; good.

Barley.—30 bushels; sample good.

Peas.—28 bushels; quality inferior, injured by the bug.

Hay.—1½ ton; well secured; crop diminished by drought.

Corn.—40 bushels; quality medium.

Potatoes.—120 bushels; quality excellent.

Turnips.—500 bushels; apparently sound and good.

Carrots.—400 bushels; quality good.

Mangolds.—600 bushels; extra good.

Insects have done less damage this season than for the past 15 years. The Colorado Beetle appeared among the potatoes, but did little mischief. *Flax*, annually increasing, and a good market in this county. *Hops*, but little cultivated, crop light, but prices remunerating. Area cultivated for Oats 20 per cent. more; for other grains 15 per cent. less than previous years, owing to the establishment of Cheese Factories all through the county. *Fruit*.—With the exception of Peaches, the principal kinds of fruit have been generally a failure.

ESSEX.

Full Wheat.—25 bushels per acre; excellent quality.

Spring Wheat.—10 bushels; fair.

Oats.—45 bushels; good.

Barley.—20 bushels; good.

Peas.—15 bushels; good.

Beans.—12 bushels; not much cultivated.

Hay.—1½ ton; quality excellent.

Corn.—40 bushels; pretty good.

Potatoes.—120 bushels; pretty good.

Turnips.—200 bushels; “ “

Carrots.—200 “ “

Mangolds.—700 “ “

The Colorado Beetle injured the potatoes in some places; other localities but little or not at all affected. *Hops*, raised to some extent, prospects good. Wheat culture is extending, and that of potatoes the reverse. The severe frosts in May, followed by so dry a summer had a bad effect on most kinds of fruit.

GLENGARRY.

Full Wheat.—35 bushels per acre; quality good; Treadwell.

Spring Wheat.—25 bushels; “ Black Sea.

Oats.—50 bushels; quality good.

Barley.—45 bushels; “ four rowed.

Peas.—30 bushels; “ small white.

Hay.—2½ tons “

Corn.—50 bushels; quality under average.

Potatoes.—250 bushels; good quality.

Turnips.—700 bushels; principally swedes, good.

Carrots.—1000 bushels; good.

Mangolds.—1000 bushels; “

Wheat and Oats cultivated to a greater extent than ever before. No injury from insects.

This section of the Province but little affected by drought. For Fruit the season was favourable.

GRENVILLE, SOUTH.

Fall Wheat.—35 bushels per acre ; quality good.
Spring Wheat.—25 bushels ; quality of early sown good.
Oats.—30 bushels ; sample heavy.
Rye.—28 bushels , very good quality.
Barley.—30 bushels ; excellent.
Peas.—20 bushels ; very good ; not much cultivated.
Beans.—50 bushels ; good ; but little sown.
Hay.—1½ ton ; very well secured.
Corn.—20 bushels ; quality inferior ; yield poor on account of cold, wet spring.
Potatoes.—200 bushels ; quality excellent.
Turnips.—300 bushels ; sound and good.
Carrots.—150 bushels ; quality good.
Parsnips and Mangolds.—But little cultivated.

The area of land under cultivation for *Winter Wheat* is yearly increasing, and the crop is getting more certain. *Hops*, raised in a few places, produced a fair crop, and with present high prices the cultivation will increase. *Fruit*—All kinds have been abundant, except plums, which were a complete failure.

GREY, SOUTH.

Fall Wheat.—20 bushels per acre ; quality excellent.
Spring Wheat.—12 bushels ; sample generally good.
Oats.—40 bushels ; quality pretty good.
Barley.—30 bushels ; sample good.
Peas.—20 bushels ; quality generally good.
Hay.—12 cwt. ; well saved ; but the extreme drought most seriously affecting the quantity.
Potatoes.—50 bushels ; quality poor ; suffered severely from summer frosts and drought.
Turnips.—100 bushels ; quality good , the crop much diminished by the drought.
Carrots, Parsnips and Mangolds.—But indifferent ; not much cultivated. Treadwell and Soule's Fall Wheat mostly raised. Frosts in June, and the subsequent drought, greatly injured wheat, peas, and corn. There were only a few very light showers between the middle of May and the 15th of August. The wheat midge did but little harm. The culture of wheat, both spring and fall, barley and turnips, increased. *Fruit*, indifferent.

HALDIMAND.

Fall Wheat.—22 bushels per acre ; first quality.
Spring Wheat.—15 bushels ; good.
Oats.—35 bushels ; good.
Barley.—35 bushels ; quality and colour never better.
Peas.—21 bushels ; injured by the bug.
Hay.—1 ton ; well saved.
Corn.—40 bushels , good.
Potatoes.—200 bushels ; good
Turnips.—200 bushels ; poor.
Mangolds.—400 bushels ; middling quality.

The sample of all kinds of grain is superior to almost any former year, particularly in colour, owing to the dryness of the season and the fine harvest weather. Midge, in some places, in Spring Wheat. Pife yielded best. Deihl and Soule's much approved. *Fruit* was much injured by early frosts and drought ; the Apple worm being very rife.

HASTINGS, NORTH.

Fall Wheat.—17 bushels ; quality good.

Spring Wheat.—16 bushels ; “

Oats.—25 bushels ; “

Rye.—16 bushels ; “

Barley.—20 bushels ; “

Peas.—17 bushels ; grain small.

Hay.—1 ton ; well harvested.

Corn.—15 bushels ; quality inferior.

Potatoes.—100 bushels ; much affected by the drought. Other root crops not much cultivated. No injury from insects in grain. *Hops*—culture somewhat extending ; crop poor. from drought. *Fruit*—season exceedingly unfavourable. Apples—scarcely half a crop.

HASTINGS, EAST.

Fall Wheat.—30 bushels per acre ; good quality.

Spring Wheat.—20 bushels per acre ; “

Oats.—35 bushels per acre ; “

Rye.—20 bushels per acre ; “

Barley.—25 bushels per acre ; excellent.

Peas.—20 bushels per acre , good.

Hay.—1 ton per acre : well saved.

Corn.—20 bushels per acre ; inferior ; suffered from drought.

Potatoes.—50 bushels ; quality good. This and other root crops suffered severely from the drought. Spring Wheat was somewhat damaged by the midge. *Hops*—less cultivated than formerly ; crop poor. Flax culture also diminishing. *Fruit*, but indifferent, from spring frosts and subsequent dry weather.

HASTINGS, WEST.

Fall Wheat.—25 bushels per acre ; quality very superior.

Spring Wheat.—10 bushels per acre ; quality fair.

Oats.—25 bushels per acre ; sample heavy.

Rye.—15 bushels per acre ; good quality.

Barley.—25 bushels per acre ; first quality.

Peas.—20 bushels per acre ; good sample.

Beans.—20 bushels per acre ; quality inferior.

Hay.—1½ tons per acre ; well saved.

Corn.—15 bushels per acre ; inferior ; not much raised.

Potatoes.—60 bushels ; very inferior both as to quantity and quality.

Turnips.—80 bushels per acre ; much below average of years. The same will apply to *Carrots* and *Mangolds*. Drought more or less affected all crops. Culture of *Barley* extending. *Hops* not much grown ; the yield but indifferent. *Spring Wheat* slightly affected by midge. *Fruit* variable ; plums and cherries in many places a failure ; and apples below an average.

HURON, NORTH.

Fall Wheat.—35 bushels per acre ; quality excellent.

Spring Wheat.—25 bushels ; sample, good.

Oats.—50 bushels ; good.

Barley.—40 bushels ; very good.

Peas.—40 bushels ; quality good.

Hay.—1 ton , well saved.

Potatoes.—175 bushels ; generally sound and good.

Turnips.—800 bushels ; somewhat damaged by drought.

Carrots.—700 bushels ; good, chiefly white Belgian.

Mangolds.—1000 bushels ; not extensively grown.

Grain crops but very little affected by insects. The Colorado Beetle was seen in a few places, but no perceptible injury done. Most of the cereals have been grown to a greater extent than last year. *Fruit*, in many places pretty fair, but most sorts were affected by the long continuous dry weather.

KENT.

Fall Wheat.—25 bushels per acre; quality good.

Spring Wheat.—15 bushels; indifferent.

Oats.—40 bushels; good.

Barley.—25 bushels; quality fair.

Peas.—20 bushels; quality injured by the bug.

Beans.—30 bushels; middling.

Hay.—1 ton; well saved.

Corn.—30 bushels; good.

Potatoes.—200 bushels; good quality.

Turnips and *Carrots* not extensively cultivated; weather too dry and hot. *Mangolds*, a moderate crop. The Colorado Beetle not so injurious as was anticipated. Area of wheat and corn increased. The season was too dry for some kinds of fruit.

LAMBTON.

Fall Wheat.—25 bushels per acre, extra good.

Spring Wheat.—12 bushels; injured by wire worm.

Oats.—38 bushels; very good.

Barley.—25 bushels; plump and bright. Brock returns 35 bushels.

Peas.—20 bushels; much affected by the bug.

Hay.—1 ton; well saved. Brock and Plympton report 1½ ton.

Corn.—40 bushels; quality poor, injured by early frosts.

Potatoes.—120 bushels; quality good, injured by drought.

Turnips.—400 bushels; not extensively cultivated; other root crop but little raised.

Deihl and Treadwell *Wheat* mostly grown, and some Amber Midge Proof. Hessian Fly, Wire Worm, and Midge in Spring Wheat, reported in some places. Colorado Beetle appeared in Potatoes in many places, but not much damage was done. But little Spring Wheat sown. *Fruit*, mostly light, partly owing to the heavy crop of last year, Apples, Pears, and Peaches very small in consequence of the dry weather. Curculio very injurious to Plums. Gooseberries, Currants, and Cherries inferior. *Grapes* prevented from fully ripening by frost.

LANARK, NORTH.

Fall Wheat.—25 bushels per acre; quality good.

Spring Wheat.—15 bushels; quality good.

Oats.—35 bushels; quality good.

Rye.—12 bushels; middling.

Barley.—35 bushels; pretty good.

Peas.—30 bushels; one vine contained 900 peas.

Beans.—20 bushels; fair.

Hay.—1 ton; fair.

Corn.—50 bushels; fair.

Potatoes.—250 bushels; fair.

Turnips.—600 bushels; “

Carrots.—500 bushels; “

Early sown grain wholly escaped the Midge, the late was slightly injured. Breadth cultivated for Fall Wheat is increasing. *Fruit*, yield of, generally inferior.

LANARK, SOUTH.

Fall Wheat.—35 bushels per acre; quality good.

Spring Wheat.—20 bushels; good.

Oats.—40 bushels; sample pretty heavy.
Rye.—25 bushels; good, but not extensively cultivated.
Barley.—35 bushels; quality good.
Beans.—16 bushels.
Peas.—30 bushels; good.
Hay.—1½ tons; quality fair.
Corn.—20 bushels; not much grown.
Potatoes.—150 bushels; extra good.
Turnips.—100 bushels; but little cultivated.
Carrots.—300 bushels; fine quality, (White and Red.)
Mangolds.—400 bushels; fair quality.

Wheat, both Winter and Spring, Barley, and Oats, extending in cultivation, the Fife variety much raised. Insects have not been very injurious to any crop. Apples, pretty good.

LEEDS, SOUTH.

Fall Wheat.—30 bushels per acre; good quality.
Spring Wheat.—20 bushels; sample good.
Oats.—50 bushels; very fair.
Barley.—40 bushels; quality good.
Peas.—25 bushels.
Beans.—But little cultivated.
Hay.—1 ton.

Corn.—60 bushels; good.
Potatoes.—150 bushels; good quality; other root crops but little cultivated.

Insects did but little injury. Culture of corn increasing for green food for stock. *Fruit* promised well when in bloom, but the subsequent drought injured both quantity and quality.

LENNOX.

Fall Wheat.—20 bushels per acre; quality good.
Spring Wheat.—15 bushels; “
Oats.—40 bushels; “
Rye.—25 bushels; “
Barley.—30 bushels; “
Peas.—20 bushels; “

Hay.—1½ ton; quality good, but drought and late spring frosts diminished the quantity.

Corn.—50 bushels; middling.

Potatoes.—75 bushels; good.

Carrots.—500 bushels; “

Mangolds.—400 bushels; middling.

Turnips.—Very light; in many cases destroyed by the fly.

Grain not sown either too early or too late wholly escaped insect depredations. *Hops*, several gardens in the county; crop pretty fair. The cultivation of barley much extending, and good malting qualities produced. The season, on the whole, was too dry for fruit.

LINCOLN.

Fall Wheat.—20 bushels per acre; quality excellent.

Spring Wheat.—11 bushels; good; not much grown.

Oats.—35 bushels; sample heavy.

Rye.—15 bushels; good; but little cultivated.

Barley.—25 bushels; quality good.

Peas.—25 bushels; middling.

Hay.—¾ ton; excellent quality; spring too dry and cold.

Corn.—40 bushels; fair quality.

Potatoes.—150 bushels; excellent; Early Rose in great favour; Peach-blows largely grown.

Turnips.—200 bushels; quality medium.

Mangolds.—400 bushels; “

Diehl wheat in much favour. Fall wheat, oats and potatoes, increasing in breadth cultivated; barley, diminished. *Apples*, especially in young orchards, severely injured by the worm. Yield of apples and pears moderate. Grapes good, but the Clinton and Delaware sorts suffered from thrips. Peaches, raspberries and strawberries, a good yield; but the spring being late and cold, and the summer very dry, some kinds of fruit did not attain to a full size, and the quality was affected.

MIDDLESEX, NORTH.

Fall Wheat.—30 bushels per acre; splendid sample.

Spring Wheat.—20 bushels per acre; average quality.

Oats.—60 bushels per acre; good.

Barley.—45 bushels per acre; good.

Peas.—30 bushels per acre; “

Hay.—1 ton per acre; “

Potatoes.—100 bushels per acre; good.

Turnips.—500 bushels per acre; “

Carrots, Parsnips and Mangolds but little raised. Insects not noticeable. Early fruit was injured by frost. Apples, &c., yield but indifferent.

MIDDLESEX, EAST.

Fall Wheat.—30 bushels per acre; first quality.

Spring Wheat.—15 bushels per acre; excellent sample.

Oats.—45 bushels per acre; good.

Barley.—28 bushels per acre; quality very good.

Peas.—30 bushels; quality injured by the bug.

Hay.—1 ton per acre; well saved.

Corn.—20 bushels per acre; injured by drought.

Potatoes.—250 bushels; excellent quality.

Turnips.—400 bushels; quality pretty good.

Carrots.—400 bushels; stood the dry weather better than turnips.

Mangolds.—600 bushels; quality good.

No midge among the grain, but the Pea bug proved mischievous; the Colorado Beetle appeared among the potatoes, but did not do much injury. The Currant worm was very destructive, and the Apple moth in greater numbers than usual. Pears and Peaches were good; other kinds of fruit inferior. Grapes were injured by frost. The extent of pasture for Dairy purposes is increasing, as is also Fall over Spring Wheat; and Mangolds and Carrots are advancing, as compared with Turnips. Flax not extensively raised, as it is considered an exhausting crop.

MONCK.

Fall Wheat.—25 bushels per acre; quality middling.

Spring Wheat.—16 bushels; good sample.

Oats.—30 bushels; quality good.

Rye.—24 bushels; good, but not much raised.

Barley.—26 bushels; sample good.

Peas.—30 bushels; excellent quality.

Beans.—Yield abundant, but confined principally to gardens.

Hay.—1½ ton; very good quality.

Corn.—But little cultivated on heavy clays.

Potatoes.—40 bushels; quality splendid. Other root crops not raised to any extent.

Fall Wheat and *Oats* are increasing in culture; the former suffered in some situations from frost. *Flax* and *Hops* very little grown. Most kinds of fruit were plentiful, except apples.

NORFOLK. NORTH.

Fall Wheat.—15 bushels per acre; quality good, but badly winter killed

Spring Wheat.—Very little cultivated in this county.

Oats.—30 bushels; sample pretty heavy, but affected by drought.

Barley.—25 bushels; quality good.

Peas.—30 bushels; good.

Hay.—1½ ton; secured in fine order.

Corn.—30 bushels; quality middling.

Potatoes.—50 bushels; quality good, but, like the succeeding crops, seriously injured by drought.

Turnips.—400 bushels; quality indifferent.

Carrots.—500 bushels; poor in quality.

Parsnips and *Mangolds* not much grown. Grain and roots not injured by insects. *Hops* not extensively grown; crop much better than the two preceding years, and prices remunerative. *Fruit.*—Peaches plentiful, and of good quality; Apples very much injured by the worm; Plums very poor.

NORTHUMBERLAND, EAST.

Fall Wheat.—35 bushels per acre; quality extra fine.

Spring Wheat.—15 bushels; fair; somewhat injured by midge.

Oats.—30 bushels; sample plump and heavy.

Rye.—12 bushels; quality good.

Barley.—30 bushels; bright and heavy.

Peas.—18 bushels, middling quality; pods not well filled; weather too dry.

Beans.—20 bushels; quality good.

Hay.—¾ ton; quality good; quantity much reduced by drought.

Corn.—20 bushels; quality middling.

Potatoes.—100 bushels; quality middling.

Turnips.—250 bushels; poor.

Carrots.—250 bushels; poor.

Mangolds.—500 bushels; good.

Spring Wheat somewhat injured by midge. Culture of *Fall Wheat* much increasing; that of *Barley* has diminished one third. *Hops.*—About 50 acres in the Riding; crop poor; *Fruit.*—Apples and Pears a pretty good yield; Cherries and Plums mostly a failure.

NORTHUMBERLAND, WEST.

Fall Wheat.—27 bushels per acre; quality very good.

Spring Wheat.—20 bushels; good.

Oats.—35 bushels; good.

Barley.—30 bushels; good.

Peas.—20 bushels; good.

Beans.—16 bushels; medium.

Rye.—12 bushels; medium.

Hay.—¾ ton; well saved.

Corn.—35 bushels; fair quality.

Potatoes.—100 bushels; quality good.

Turnips.—300 bushels; quality good.

Carrots.—350 bushels; quality good.

Mangolds.—400 bushels; quality good.

The crops have suffered very little from the attacks of insects; except in some places by grasshoppers. *Hops.*—Only a few fields cultivated; the crop a failure. Stone Fruit very indifferent, but Apples and Pears good.

ONTARIO, SOUTH.

Fall Wheat.—35 bushels per acre; quality good.

Spring Wheat.—25 bushels; quantity good.

Oats.—45 bushels; “

Rye.—25 bushels; “

Barley.—30 bushels; “

Peas.—25 bushels; “

Hay, about an average. *Potatoes* and *Turnips*, pretty good. *Corn*, *Carrots* and *Mangolds*, inferior. *Flax*, but little cultivated. Fruit was backward; a small white fly injured the Clinton grape.

OXFORD, NORTH.

Fall Wheat.—25 bushels per acre; quality excellent.

Spring Wheat.—23 bushels; very good.

Oats.—45 bushels; quality never better.

Barley.—35 bushels; bright, but not heavy.

Peas.—27 bushels; good.

Hay.—1½ ton; quality excellent.

Corn.—Yield indifferent; quality fair.

Potatoes.—Early varieties only yielded well; quality good.

Other root crops generally indifferent.

In many places *Fall Wheat* was badly winter killed, and it was only when sheltered that 40 or 50 bushels per acre were obtained. Treadwell is a favourite variety, and Diehl yields a choice sample. Fife maintains its superiority, but spring wheat was injured by the drought when blooming. Oxford is well adapted for *Flax*, and large breadths are devoted to its culture. Mr. Brown, of Beachville, has 600 acres; and Mr. Wagner, of Tavistock, an equal amount; besides smaller quantities belonging to various persons; its culture is extending; which is especially the case with winter wheat. The Colorado Beetle made its appearance, but did little harm. *Fruit* was various; Apples damaged by the worm; Plums less affected by Curculio, and Pears were grown to perfection.

PERTH, SOUTH.

Fall Wheat.—30 bushels per acre; first quality.

Spring Wheat.—20 bushels; “

Oats.—50 bushels; “

Barley.—35 bushels; “

Corn.—40 bushels; “

Peas.—30 bushels; “

Hay.—1½ ton; “

Potatoes.—300 bushels; good.

Turnips.—500 bushels; “

Carrots.—500 bushels; “

Mangolds.—700 bushels; “

A little midge in *Spring Wheat*; less sown than formerly. Soules and Diehl most productive winter varieties; culture extending; as also Barley, Harrison, Garnet Chili, and Early Rose Potatoes, would average 400 bushels per acre. Weather too hot and dry for most crops. *Flax*, 1,100 acres sown. About 600 tons delivered at Mitchell; 390 tons at Stratford; and 1,181 tons at St. Mary's; price \$12 per ton. The breadth of *Fall Wheat* has been doubled, and that of root-crops much increased. *Fruit* variable. Currants much injured by a small green worm. Apples and stone fruit suffered from the extreme dry weather. Grapes very fine.

RENFREW, SOUTH.

Fall Wheat.—22 bushels per acre; quality good.

Spring Wheat.—12 bushels; fair.

Oats.—35 bushels; quality variable, arising from difference in time of ripening.

Rye.—15 bushels; not much cultivated.

Barley.—12 bushels; very little grown.

Peas.—18 bushels ; fair.

Hay.— $\frac{5}{4}$ ton ; good quality ; quantity much diminished by drought.

Corn.—30 bushels ; inferior quality.

Potatoes.—200 bushels ; quality good. Garnet Chili, excellent cropper.

Other root crops not much cultivated. *Turnips*—very unequal.

Fall Wheat culture, increasing. White Flint and Blue Stem preferred. Spring Wheat not so certain as formerly. Insect depredations in grain very trifling. *Fruit* generally deficient, in consequence of the cold spring and subsequent dry season. Plums very much injured by the cureulio.

SIMCOE, NORTH.

Fall Wheat.—35 bushels per acre ; sample excellent.

Spring Wheat.—12 bushels ; fair.

Oats.—30 bushels ; good.

Barley.—0 bushels ; good.

Peas.—15 bushels ; quality fair. Drought injurious.

Hay.— $\frac{3}{4}$ ton ; well saved.

Potatoes.—150 bushels ; quality good.

Turnips.—400 bushels ; small size. Injured by grass-hoppers. Other root crops not much raised.

Winter Wheat.—The Treadwell most raised, but the Soules yielded rather better. Fife, the principal Spring variety, which has been gradually deteriorating both in quantity and quality. Much need of new and improved varieties, by way of change. The Colorado Potato Beetle made its appearance, but not in sufficient numbers to do much injury. Midge but very little heard of. A small white aphid or louse badly affected the turnips, killing them entirely in patches, and also cabbages. *Fruit*—Apples unusually small ; plums very few, except the common red, which were much inferior than usual.

STORMONT.

Fall Wheat.—30 bushels per acre ; good quality.

Spring Wheat.—18 bushels ; “

Oats.—40 bushels ; excellent ; best samples for years.

Rye.—30 bushels ; good, not extensively grown.

Barley.—35 bushels ; very bright sample.

Peas.—5 bushels ; very good.

Hay.—1 ton ; “

Corn.—Inferior, both as to quantity and quality. Injured by early frosts.

Potatoes.—200 bushels ; quality good.

Turnips.—Crop pretty good, but like other root crops, not extensively grown.

Hops only grown for domestic consumption ; produce satisfactory. *Fall Wheat* does better than formerly, and is increasing in breadth. Black Sea Spring variety most approved ; hardy and almost midge proof. Hay and pastures increasing in breadth, as the Dairy business is steadily extending. *Fruit*—Apples, a good yield, and pretty well grown ; small fruits an average, except cherries, which were a failure.

WATERLOO, SOUTH.

Fall Wheat.—15 bushels per acre ; quality excellent. All varieties much injured by frost.

Spring Wheat.—12 bushels ; good quality. Not much grown.

Oats.—25 bushels ; light ; straw short, and in some places much injured by grasshoppers.

Barley.—25 bushels ; quality excellent. All four-rowed.

Peas.—20 bushels ; first-rate quality.

Hay.— $\frac{3}{4}$ ton ; excellent quality.

Potatoes.—90 bushels; poor quality; Garnet Chili the most prolific, and Early Rose the best quality.

Turnips.—250 bushels, quality good. Injured by drought, the fly and grasshoppers.

Carrots.—200 bushels; good; not so much cultivated as formerly, on account of the large amount of hand labour required.

Turnip fly and grasshoppers did great injury in some situations, and scarcely any in others. *Flax* diminishing in area, and likely to continue so. *Hops* not much cultivated, some grounds ploughed up. It is found that they cannot be profitably grown, except near towns and villages, where manure and pickers can easily be obtained. Breadth of Spring Wheat yearly diminishing, and that of Turnips increasing. The season not generally favourable for fruit. Apples much injured by the worm.

WENTWORTH, NORTH.

Fall Wheat.—15 bushels per acre; good quality.

Spring Wheat.—12 bushels; fair.

Oats.—35 bushels; superior.

Barley.—30 bushels; good.

Peas.—25 bushels; good.

Hay.— $\frac{3}{4}$ ton; quality superior.

Potatoes.—75 bushels; good.

Turnips.—400 bushels; fair.

Carrots.—500 bushels; fair.

Mangolds.—500 bushels; fair.

Fall Wheat in some places was badly winter killed; greater breadth sown, and less of Barley. Diehl, Soules, and Treadwell, the most approved varieties. The Colorado Potato Beetle was found in several places, but not in sufficient numbers sensibly to diminish the crop. The severe drought was generally injurious. Apples rather inferior; Pears good; but all the small fruit indifferent.

WELLAND.

Fall Wheat.—20 bushels per acre; quality good.

Spring Wheat.—10 bushels; poor quality, very little sown.

Oats.—35 bushels; sample good.

Barley.—20 bushels; “ “

Peas.—20 bushels; “ “

Beans.—12 bushels; “ “

Hay.— $\frac{3}{4}$ ton; “ “

Corn.—40 bushels (ears); middling.

Potatoes.—150 bushels; quality very good. Early Rose an excellent early variety, and Peach Blow, late.

Turnips and Carrots, not extensively grown, and much affected by the dry weather.

Mangolds.—450 bushels; good quality.

Fall Wheat extending yearly in culture; Diehl, Treadwell, Boyer and Mediteranean the most approved varieties; sown from 1st to 15th September. *Hops*, but little cultivated; a most uncertain crop. Season has been too dry for fruit in general; but most kinds pretty good in quality, but of small size. Currant worm extensively injurious, and the apple worm also in some localities.

WELLINGTON, NORTH.

Fall Wheat.—35 bushels per acre; quality superior.

Spring Wheat.—25 bushels; good, but short in straw.

Oats.—40 bushels; “

Barley.—30 bushels; grain light, but bright.

Peas.—30 bushels; good.

Hay.— $\frac{1}{2}$ ton; only about $\frac{1}{2}$ of a crop.

Potatoes.—Very variable; in some places a tolerably fair crop, in others scarcely the seed

again. The unusual frost on the 30th June, and another almost unprecedented about the middle of July destroyed the tops. The season was also most unfavourable to *Turnips* and *Mangolds* each of which would average about 300 bushels per acre. Very little damage done by insects. *Flax*, raised to some extent, the crop about an average. Many farmers do not care to grow it, considering it an exhaustive crop. *Apples* and garden fruits have been pretty fair, considering the character of the season.

WELLINGTON, CENTRE.

Fall Wheat.—25 bushels per acre ; quality good.

Spring Wheat.—15 bushels ; fair quality.

Oats.—30 bushels ; good.

Barley.—25 bushels ; good.

Peas.—20 bushels ; good.

Hay.—1 ton ; quality fair.

Potatoes.—150 bushels ; below an average, in some places a failure.

Turnips.—500 bushels ; bulbs small, quality pretty good, considering the severe drought.

Other root crops not much cultivated.

Fruit, generally, pretty good.

YORK, NORTH.

Fall Wheat.—25 bushels per acre ; quality very good.

Spring Wheat.—20 bushels ; average quality.

Oats.—35 bushels ; sample good.

Barley.—30 bushels ; good. *Peas*.—20 bushels.

Hay.—1 ton ; well saved. *Corn*.—Almost a failure.

Potatoes.—50 bushels ; quality good.

Turnips.—150 bushels ; poor.

Carrots.—150 bushels ; middling.

Parsnips and *Mangolds*.—Not extensively grown ; the latter rather poor. Wheat, in some places, much injured by winter killing ; in others, 30 and 40 bushels per acre were produced. The Colorado Potato Beetle appeared in some places, but did not do much injury. The Spring was too cold, and the summer too hot and dry, to be favourable to *Fruit* ; Apples, particularly, suffered severely by the worm.

YORK, EAST.

Fall Wheat.—35 bushels per acre ; quality never better.

Spring Wheat.—18 bushels ; sample good.

Oats.—40 bushels ; good.

Barley.—30 bushels ; good.

Peas.—30 bushels ; good.

Hay.—1 ton ; very light, but quality good.

Corn.—Very inferior.

Potatoes.—80 bushels ; quality fair.

Turnips.—400 bushels ; sound and good.

Carrots.—300 bushels ; not so heavy as usual.

Mangolds.—600 bushels ; good.

Cultivation of *Winter Wheat* is increasing. No complaints of insects in any of the crops. *Fruit*.—But indifferent ; weather too dry.

YORK, WEST.

Fall Wheat.—32 bushels ; first quality.

Spring Wheat.—25 bushels ; $\frac{1}{2}$ good.

Oats.—38 bushels ; very fair.

Rye.—30 bushels ; very little cultivated.

Barley.—30 bushels ; sample very bright and plump.

Peas.—27 bushels ; very good.

Hay.—1 $\frac{1}{4}$ ton ; quality excellent.

Corn.—20 bushels ; very little grown.

Potatoes.—100 bushels ; quality fair ; much injured by late frosts and subsequent drought.

Turnips.—The crop promises at present to be very indifferent ; which remark will apply generally to Carrots, Parsnips, and Mangolds.

The Soules and Diehl Wheats increasing in breadth cultivated ; but few insect depredations this season. The Colorado Beetle made its appearance in a few places, but did little or no harm. *Fruit*.—In most localities but indifferent. Owing to the extreme dry weather of so long continuance, the size of most varieties of fruit was unusually small, but the quality generally was good.

Estimated average of grain per acre, made up from Returns of Electoral Division Societies to the Bureau of Agriculture, for the years 1868, 1869, 1870, and 1871.

	1871—47 Returns.	1870—48 Returns.	1869—51 Returns.	1868—47 Returns.
Fall Wheat.....	27 $\frac{3}{8}$ bushels.....	15 $\frac{3}{4}$ bushels.....	21 $\frac{3}{4}$ bushels.....	20 $\frac{1}{8}$ bushels.
Spring Wheat....	17 $\frac{6}{8}$ do	12 do	19 $\frac{1}{4}$ do	14 do
Oats.....	37 $\frac{6}{8}$ do	29 do	39 do	24 do
Rye.....	19 $\frac{6}{8}$ do	12 do	18 do	17 $\frac{1}{2}$ do
Barley	30 do	22 do	30 $\frac{1}{2}$ do	22 $\frac{1}{2}$ do
Peas.....	24 $\frac{2}{8}$ do	19 do	22 $\frac{1}{4}$ do	14 do

APPENDIX TO REPORT

OF THE

Commissioner of Agriculture and Arts.

APPENDIX (G.)

AMOUNTS EXPENDED FOR THE ENCOURAGEMENT OF AGRICULTURE AND ARTS IN ONTARIO IN 1871.

No. 1.—Amounts paid to Agricultural Societies in 1871.

NAME OF SOCIETY.	AMOUNT.	NAME OF SOCIETY.	AMOUNT.
	\$ cts.		\$ cts.
Addington.....	700 00	<i>Brought forward</i>	20,621 00
Algoma*.....	321 00	Lambton.....	700 00
Brant, N.	700 00	Lanark, N.....	700 00
Do. S.	700 00	Do. S.	700 00
Bruce, N.	700 00	Leeds & Grenville, N.....	700 00
Do. S.	700 00	Do. S.....	700 00
Brockville.....	350 00	Lennox	700 00
Bothwell.....	700 00	Lincoln	700 00
Carleton.....	700 00	London	350 00
Cardwell.....	700 00	Middlesex, N.....	700 00
Cornwall.....	350 00	Do. E.....	700 00
Durham, E.	700 00	Do. W.....	700 00
Do. W.	700 00	Monck.....	700 00
Dundas.....	700 00	Niagara.....	350 00
Elgin, E.	700 00	Northumberland, E.....	700 00
Do. W.	700 00	Do. W.....	700 00
Essex.....	700 00	Norfolk, N.....	700 00
Frontenac.....	700 00	Do. S.....	700 00
Glengarry.....	700 00	Ontario, N.....	700 00
Grenville, S.....	700 00	Do. S.....	700 00
Grey, N.....	700 00	Oxford, N.....	700 00
Do. S.	700 00	Do. S.....	700 00
Haldimand.....	700 00	Ottawa.....	350 00
Halton.....	700 00	Peel.....	700 00
Hamilton.....	350 00	Perth, N.....	700 00
Hastings, N.....	700 00	Do. S.....	700 00
Do. E.....	700 00	Peterborough, E.....	700 00
Do. W.....	700 00	Do. W.....	700 00
Huron, N.....	700 00	Prescott.....	700 00
Do. S.....	700 00	Prince Edward.....	700 00
Kent.....	700 00	Renfrew, N.....	700 00
Kingston.....	350 00	Do. S.....	700 00
<i>Carried forward</i>	20,621 00	<i>Carried forward</i>	41,271 00

* This Society did not qualify so as to receive the full amount of the grant, \$700.

No. 1.—Amounts paid to Agricultural Societies in 1871.—*Continued.*

NAME OF SOCIETY.	AMOUNT.	NAME OF SOCIETY.	AMOUNT.
	\$ cts.		\$ cts.
<i>Brought forward</i>	41,271 00	<i>Brought forward</i>	47,421 00
Russell.....	700 00	Welland.....	700 00
Simcoe, N.....	700 00	Wellington, N.....	700 00
Do. S.....	700 00	Do. C.....	700 00
Stormont.....	700 00	Do. S.....	700 00
Toronto.....	550 00	Wentworth, N.....	700 00
Victoria, N.....	700 00	Do. S.....	700 00
Do. S.....	700 00	York, N.....	700 00
Waterloo, N.....	700 00	Do. E.....	700 00
Do S.....	700 00	Do. W.....	700 00
<i>Carried forward</i>	47,421 00	Total	53,721 00

No. 2.—Amounts paid to Mechanics' Institutes, in 1871.

NAME OF INSTITUTE.	AMOUNT.	NAME OF INSTITUTE.	AMOUNT.
	\$ cts.		\$ cts.
Ayr.....	400 00	<i>Brought forward</i>	5,741 40
Barrie.....	400 00	Mount Forest.....	125 50
Berlin.....	306 40	Niagara.....	400 00
Bradford.....	200 00	Paris.....	200 00
Brampton.....	292 00	Peterborough.....	400 00
Brantford.....	400 00	Port Perry.....	400 00
Collingwood.....	400 00	Renfrew.....	70 00
Dundas.....	400 00	Richmond Hill.....	70 00
Galt.....	400 00	St. Catharines.....	400 00
Grimsby.....	400 00	Simcoe.....	400 00
Guelpb.....	293 00	Smith's Falls.....	150 00
Hamilton.....	400 00	Stratford.....	250 00
Hespeler.....	400 00	Streetsville.....	400 00
Ingersoll.....	400 00	Thorold.....	400 00
London.....	400 00	Toronto.....	400 00
Meaford.....	150 00	Woodstock.....	400 00
Milton.....	100 00	Total	10,206 90
<i>Carried forward</i>	5,741 40		

No. 3.—Total Payments for encouragement of Agriculture and Arts made in 1871.

SERVICE.	Appropriation.	Expended to 31 December, 1871.	Unexpended or over-expended.
	\$ cts.	\$ cts.	\$ cts.
Electoral Division Societies, 73 at \$700.....	51,100 00	50,721 00	379 00
Do. 1 at \$550.....	550 00	550 00	
Do. 7 at \$350.....	2,450 00	2,450 00	
Fruit Growers' Association.....	500 00	500 00	
Entomological Society.....	500 00	500 00	
Agricultural and Arts Association.....	10,000 00	10,000 00	
Mechanics' Institutes.....	10,000 00	10,206 90	206 90*
Total.....	75,100	74,927 90	172 10

* This is over-expenditure.

F. T. JONES,
Accountant.

